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Scottish Birds

THE JOURNAL OF
THE SCOTTISH ORNITHOLOGISTS' CLUB

Edited by
A. T. MACMILLAN

with the assistance of
D. G. ANDREW T. C. SMOUT

Business Editor, T. C. SMOUT

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VOLUME 2

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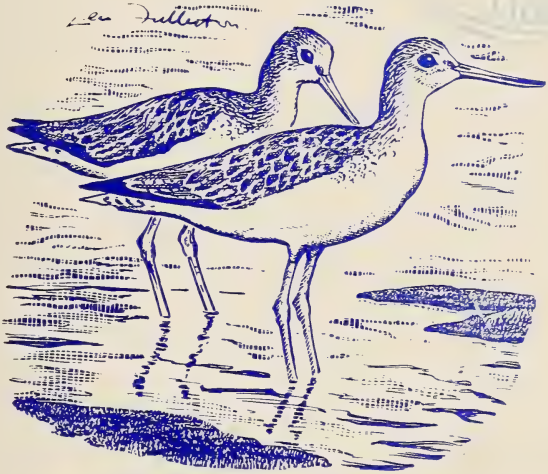
SCOTTISH BIRDS



The Journal of The Scottish Ornithologists' Club

Vol. 2 No. 1 *Spring 1962*

FIVE SHILLINGS

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Dumfries, Dundee, Edinburgh, Glasgow and St Andrews, at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish Ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited, and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. Joint membership is available to married couples at an annual subscription of 40/-. "Scottish Birds" is issued free to members, but Joint members will receive only one copy between them.

The affairs of the Club are controlled by a Council composed of the Hon. Presidents, the President, the Vice-President, the Hon. Treasurer, the Editor and Business Editor of "Scottish Birds," the Hon. Treasurer of the House Fabric Fund, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

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The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to Members during office hours, and on Wednesday evenings from 7 to 10 p.m. Members may use the Reference Library and borrow books from the Duplicate Section. Facilities for making tea or coffee are available at a nominal charge and Members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen may be used for the informal showing of slides at a charge of 2s 6d per night to cover the replacement of bulbs.

NOTICE TO CONTRIBUTORS

All contributions should be sent to Andrew T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Attention to the following points greatly simplifies production of the journal and is much appreciated.

1. Papers should if possible be typed with double spacing. All contributions should be on one side of the paper only.

2. Topical material for Current Notes should reach the Editors by the end of March, June, September and December. at which time they begin to compile this section. All other notes should be sent promptly but important items can be fitted in until a month or so after these dates.

3. Proofs will normally be sent to authors of papers, but not of shorter items. Such proofs should be returned without delay. If alterations are made at this stage it may be necessary to ask the author to bear the cost.

4. Authors of full-length papers who want copies for their own use MUST ASK FOR THESE when returning the proofs. If requested we will supply 25 free copies of the issue in which the paper is published. Reprints can be obtained but a charge will be made for these.

5. Particular care should be taken to avoid mistakes in lists of references and to lay them out in the following way, italics being indicated where appropriate by underlining.

EGGELING, W. J. 1960. *The Isle of May.* Edinburgh and London.
DICK, G. & POTTER, J. 1960. Goshawk in East Stirling. *Scot. Birds* 1:329.

6. English names should follow *The Handbook of British Birds* with the alterations detailed in *British Birds* in January 1953 (46:2-3) and January 1956 (49:5). Initial capitals are used for names of species (*e.g.* Blue Tit, Long-tailed Tit) but not for group names (*e.g.* diving ducks, tits). Scientific names should be used sparingly (see editorial *Scottish Birds* 2:1-3) and follow the 1952 B.O.U. *Check-List of the Birds of Great Britain and Ireland* with the changes recommended in 1956 by the Taxonomic Sub-Committee (*Ibis* 98:158-68), and the 1957 decisions of the International Commission on Zoological Nomenclature (*Ibis* 99:369). When used with the English names they should follow them, underlined to indicate italics, and with no surrounding brackets.

7. Dates should normally be in the form "1st January 1962", with no commas round the year. Old fashioned conventions should be avoided—*e.g.* use Arabic numerals rather than Roman, and avoid unnecessary full stops after abbreviations such as "Dr" and "St".

8. Tables must be designed to fit into the page, preferably not sideways, and be self-explanatory.

9. Headings and sub-headings should not be underlined as this may lead the printer to use the wrong type.

10. Illustrations of any kind are welcomed. Drawings and figures should be up to twice the size they will finally appear, and on separate sheets from the text. They should be in Indian ink on good quality paper, with neat lettering by a skilled draughtsman. Photographs should either have a Scottish interest or illustrate contributions. They should be sharp and clear, with good contrast, and preferably large glossy prints.

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DOWN THE LONG WIND

by
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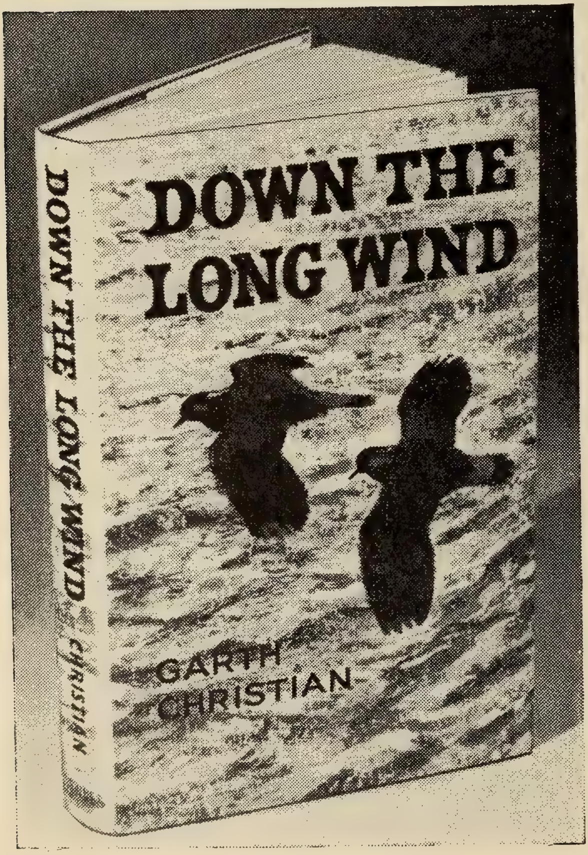

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SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 2 No. 1 **Spring 1962**

Edited by A. T. Macmillan with the assistance of D. G. Andrew and T. C. Smout. Business Editor, Arthur J. Smith. Cover design (Greenshanks) by Len Fullerton. *Published quarterly.*

Editorial

WITH this number of *Scottish Birds* we start Volume 2. Since it was launched some three and a half years ago *Scottish Birds* has been edited by Professor M. F. M. Meiklejohn who has been responsible for both the general policies of the journal and the major burden of the detailed work involved in producing it quarter by quarter. Not everyone will realise just how many nights work on each number this entails. Uncertain health in recent months and a growing volume of his own work have unfortunately made it more and more difficult for Professor Meiklejohn to devote the time he would like to give to *Scottish Birds,* and he has therefore asked that someone else should take over. The Scottish Ornithologists' Club undoubtedly owes a great debt to him for guiding the journal so ably through its pioneering years, and we are glad to know that we may continue to call upon his services in an informal capacity.

In order to strengthen the editorial team we have asked Dr T. C. Smout to join us, and we feel sure that his wide experience of birds in many parts of Europe together with his lively approach to bird-watching, will be a considerable asset to *Scottish Birds.*

A. T. Macmillan will be the new Editor, and he will be assisted by D. G. Andrew and Dr Smout. The work of planning and compiling each number will be shared in whatever way seems most convenient to allow for holidays and other commitments—this number, for instance, being largely the work of D. G. Andrew—and the intention is to work as a team. Contributions from all parts of the country, however, should be sent to A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. A. J. Smith will continue to deal with the business side of production.

It would be greatly appreciated if all important notes could be sent in promptly, and matters of more passing interest reported quarterly to reach the editors at the end of December, March, June and September. These arrangements will make it much easier to publish each number of the journal on the due date—1st March, June, September and December. Stop Press matters can be accepted until about a month before publication.

In a recent letter to the Editors of *British Birds* (54:405-8) Dr W. R. P. Bourne has argued that the use of scientific, or Latin, bird names should be abandoned by local journals published in countries with reasonably stable vernacular names. Up to a point we agree with him. The object of using a scientific name is to establish the identity of the bird beyond question for readers. In the past there was so much uncertainty about English names that it could be said that this object was best achieved by the use of scientific names—in spite of the frequent changes which these also undergo to keep pace with new ideas about classification and to keep them in line with the Law of Priority in Zoological Nomenclature. Since British bird-watchers, unlike those in most other parts of the world, are most reluctant to learn these scientific names it has been necessary to give every name twice—once in English, and once in Latin. Arguments for this procedure lose much of their force if there is an acceptable list of standard English names from which one can work. Unfortunately the English names given in the 1952 B.O.U. *Check-List of the Birds of Great Britain and Ireland* are out of date, and one must look elsewhere for current usage.

We propose to follow *British Birds* in using the English names given in *The Handbook of British Birds* with the changes detailed in *British Birds* in January 1953 (46:2-3) and January 1956 (49:5). This does not cover subsequent additions to the British list—such as the Collared Dove, which was then known as the Collared Turtle Dove—but we do not see this causing any difficulty. For scientific nomenclature we follow the 1952 B.O.U. *Check-List,* with the changes recommended in 1956 by the Taxonomic Sub-Committee (*Ibis* 98:158-68), and the 1957 decisions of The International Commission on Zoological Nomenclature (*Ibis* 99:369).

It is our policy to be sparing in the use of scientific names. We have already abandoned them altogether in Current Notes, and in the Short Notes where a species is not the subject of the note and is only mentioned in passing. In future, where scientific names are not required for clarity we will use them only for some other good reason. We will be guided by the needs of authors. For example, there might be strong arguments for using them if an author requires reprints for distribution to people unfamiliar with the English names and lacking details of our practice which would enable them to look them up. The same considerations may apply to Check-Lists which comment on changes in status over a period. Our audience is, however, mainly an English speaking one, and we would hope that a universally acceptable list of English names will soon be published so that we can drop the use of Latin names altogether. At the end of each volume, however, we intend to give a complete list of the English and scientific names of all species mentioned.

Plans are in hand for a number of interesting articles, and several papers of major importance are being prepared for coming numbers. We would nonetheless welcome suggestions or contributions, because the quality of *Scottish Birds* must depend largely on the quality of the material offered to us.

An index is now being compiled for Volume 1, and this should greatly simplify the process of looking up records published during the past three and a half years. It is hoped to send it out with the next number, and at the same time details will be given of arrangements for binding Volume 1.

THE SPRING DEPARTURE OF COMMON GULLS *LARUS CANUS* FROM SCOTLAND

W. R. P. BOURNE and I. J. PATTERSON

Introduction

Common Gulls from Scandinavia are one of the commonest winter visitors to agricultural areas in the northern parts of the British Isles, and the pattern of distribution of the ringing returns suggests that they must migrate across the North Sea (M. C. Radford, *Bird Study* 7:81). As yet, however, there is remarkably little information about the manner of their migration, except that numbers appear at Fair Isle in overcast or foggy weather associated with E to SE winds ahead of fronts in the North Sea in autumn, adults generally predominating in the main passage in August and early September, and a high proportion of juveniles occurring in the only fall so far recorded in early October (P. Davis & P. Hope Jones, *Bird Migration* 1:36). There seem to be few previous records of the movements of this species in Scotland in spring, though in England large flocks can sometimes be seen gathering in the fields or flying east calling high overhead by day in late March and early April.

During observations on bird migration with radar in Aberdeenshire in the springs of 1959 and 1960, W.R.P.B. noticed regular NE to NNE departures in the middle of the day of large, bright, high-flying echoes of the sort thought to be caused by moderate-sized flocks of shore or water birds. The passage usually started far inland during the morning and passed away towards Norway during the afternoon and evening at airspeeds around 30 knots, though since the wind was usually behind the birds they were often travelling much faster, sometimes at 50-60 knots. They moved on a broad front inland, more starting to the south than to the north of Aberdeenshire, and when they reached the coast a proportion normally flew along it before putting out to sea, so that a series of parallel streams of birds went out to sea from the headlands, with fewer birds leaving between them, as in Figure 1. The best view was obtained of the stream leaving Rattray Head at the NE extremity of Aberdeenshire, but a larger stream could be seen going by out at sea which

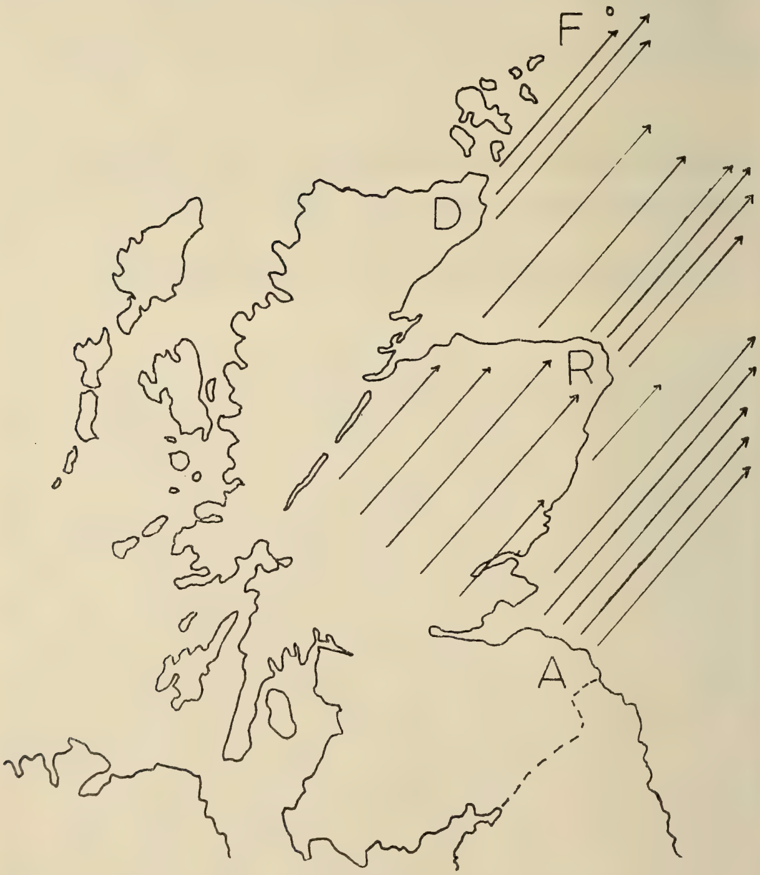

Figure 1. The general pattern of departure of Common Gulls leaving Scotland by day. A, R, D and F are St Abb's, Rattray and Duncansby Heads, and Fair Isle.

must have originated in the Forth area to the south, while when Dr M. T. Myres carried out parallel observations with radar in Shetland in the spring of 1960, he saw the stream from Rattray Head passing by out at sea to the east, sometimes another smaller stream coming from the direction of Duncansby Head in Caithness, and odd birds leaving Orkney and Shetland.

Occasionally a few birds were seen leaving by day in March, but the number was small then. The main diurnal departures occurred during a short period in April, between 11th and 16th April in 1959 and between 5th and 9th April in 1960, and since the only birds which W.R.P.B. managed to see going out to sea by day in Aberdeenshire during this period were Common Gulls, and such a departure was not seen at any other time, the movement was presumably largely composed of this species. It subsequently transpired that I.J.P. and R. McBeath had already collected a series of notes of Common Gull departures from St Abb's Head in Berwickshire at this time in the same and previous years, and had also seen a much more dramatic movement than any witnessed in Aberdeenshire. Since this area lies within the region of departure of the most southerly and largest of the streams seen with radar out at sea we have agreed to publish our observations together.

Acknowledgments

The radar observations were carried out at an R.A.F. Station, and the personnel of the station have been extremely kind in providing all possible facilities for the work, including hospitality in the Officers Mess. The work was financed by a grant spread over three years from the Department of Scientific and Industrial Research, and was carried out under the direction of Dr David Lack, who was himself undertaking similar investigations in East Anglia. We are also grateful to Messrs Dougal G. Andrew and Andrew T. Macmillan, Dr I. C. T. Nisbet and especially Dr David Lack for helpful criticism of a draft of this paper, Mr Peter Davis, Dr W. J. Eggeling and Mr George Waterston for information and access to the Fair Isle and Isle of May Bird Observatory records, and Messrs Dougal G. Andrew and R. McBeath and Dr M. T. Myres for allowing us to incorporate their records.

SUMMARY OF OBSERVATIONS

Previous observations. The only important previous observations of the spring migration of Common Gulls in Scotland appear to be those described by K. Williamson, D. G. Andrew and I. Munro in 1952 (*Fair Isle Bird Observatory Bull.* 1(7): 6). They report that during the middle of a visit to the Isle of May in early April 1952 they had westerly weather and saw a high eastwards departure of Common Gulls, and only Common Gulls. Referring to this species, they record: "during the westerly and SW (weather) evening passage was in progress from about 1700 hrs. Birds were first heard passing on the 5th, but were not located for a time, until we realised that they were passing high overhead. Two singles and a group of eight were watched heading out to sea NNE at 1845 hrs, with a force 3 surface wind from the WSW. Next evening parties of five, five and four passed between 1700 and 1900 hrs going NE on a west (force) 3 wind. On the 8th we saw one and seven going NE at 1800 hrs with the wind south, force 2. The weather charts for these evenings show that these gulls were using a cyclonic approach to the Norwegian coast round the base of a depression which was moving from the west towards Shetland. The birds went over quite high, at about 500 ft, and their passage was detected by their call-notes. Perhaps many were leaving the Forth area, and we saw only those crossing the island, where not the slightest deviation was noticeable. On the evening of the 8th, with the surface wind SE but the upper air-mass definitely moving in from the SW, the gulls were flying much higher than usual, at least 700 ft. There was no passage on the 9th, when the North Sea winds were south to SSE."

Mr Andrew informs us that on returning from this visit he saw a similar NE evening departure from Gladhouse Reservoir near Edinburgh on the evening of 13th April 1952, and again on 1st and 22nd March 1953, 12th March 1955, and 13th January and 24th March 1957. On each occasion only Common Gulls were involved, and on each occasion the movement was noted in the late afternoon, when the departure to the N or NE was in marked contrast to the normal movement in the opposite direction of birds coming in to a local roost. On each occasion his attention was drawn to the departure by a high-pitched *"kok"* call also heard on the Isle of May which is possibly associated with long-distance movements. He thought that the birds must be starting a trans-North Sea crossing. It is notable that these records occur earlier in the year than those recorded below, but that the birds were departing in the late afternoon, the time when the first passages seen with radar started to come through in early April, though by mid-April the big departures occurred in the middle of the day. Possibly the first birds move rather late in the day, or come from Ireland so that they only reach east Scotland late in the day; or alternatively, perhaps the birds fly high early in the day while fewer observers are out then, so that they are more likely to be seen when more people are out and they are starting to fly low and settle in the late afternoon. In any case, they seem to be moving in larger numbers in April than in March; thus H. Boase recently reported that on 7th April 1961 300 Common Gulls were seen moving NE in half an hour at Invergowrie, Perthshire, at the time of the main emigration of this species (*Scottish Birds* 1:499).

Observations in 1957. In this year Mr Andrew saw his last evening departure from Gladhouse Reservoir on 24th March, but an anticyclone then settled over Scandinavia at the end of March and remained there for a week, then being replaced by another anticyclone to the NW of the British Isles for another week. In consequence throughout the first part of April the NE coast of Britain had fine cool weather with at first E to NE and then N to NW winds. During 12th and 13th April the area of high pressure to the NW shifted south, and a ridge followed by a trough associated with the development of a front moved east across the British Isles, the wind backing from NW to S ahead of the trough, then veering to W as it passed. It appears that in this year the main Common Gull departure may have been delayed by contrary winds until the arrival of the trough on 13th April, and then occurred in a rush when the wind at last changed to west behind it.

I.R.P. and R.McB. saw the first flock of Common Gulls pass high over Kirk Hill, St Abb's, on 30th March, and several flocks went east there with cold S to SE force 4 to 5 winds the following day. With a very cold force 6 NE wind on 12th April a stream of Common Gulls followed the cliffs to Float Carr Point, accumulated into a flock of 32 birds there, and then set off high out to sea to the NE in V formation. It seems likely that other birds were grounded inland by the strong contrary wind this day.

The following day, 13th April, is the day when the ridge and trough passed. In Berwickshire the weather was fine and sunny with a light, decreasing wind veering from west to north during the day, so presumably the front had already passed before the observations started. From 0930 hrs flocks of Common Gulls could be seen circling upwards inland, possibly in rising air currents in the unstable polar maritime air behind the front, and then passing out to sea high to the NNE from St Abb's Head lighthouse. A minority of lower-flying birds also went NW up the line of the cliffs. 1261 birds passed in 30 minutes in the middle of the day, and if the rate of passage was as steady as it seemed 17,500 birds could have passed during the period of observation. The main passage ended about 1630 hrs as the wind swung round to north, but two flocks continued to gather on the sea off Shelley till 1830 hrs, about half an hour before sunset, by which time there were about a thousand birds. These then rose and after circling out to sea for about a mile most of them apparently went out NNE after the sun had set.

No further observations were made this year.

Observations in 1958. In this year a watch was kept in Berwickshire by R.McB. on 30th March and 2nd, 3rd, 6th, 8th, 10th, 12th, 13th, and 27th April. No Common Gulls were seen except on 8th April, when a few were present on the headland, where this species is not usually seen.

Observations in 1959. In this year W.R.P.B. carried out observations both visually along the coast and with radar in Aberdeenshire from 27th February until 15th March and again from 5th April to 20th May. The first few birds were seen going out NE on the radar by day after the passage east of a front overnight on 12th March, but then no more were seen until after the gap in observations on 6th April, when a few more were going out again. No birds were seen directly leaving Aberdeenshire during this time, and R.McB. saw no movement at St Abb's Head on 27th and 30th March and 2nd April.

A depression took three days to cross the area after 6th April, moving away on the 10th. Another small NE departure started on the radar in the middle of the day on the 10th, and had become strong by dusk, when it merged with a large evening passerine departure. All next day a strong NE to NNE departure could be seen on the radar in fine clear weather with a rising SW to W wind, and while W.R.P.B. saw no birds leave the Aberdeenshire coast during a 45 minute watch at the height of the passage in the afternoon, I.R.P. saw several parties of Common Gulls go over very high NNE calling in Berwickshire. The passage ended with the approach of a front from the west in the evening, and there was a SE gale and rain as the front passed out east overhead during the night.

By the morning of 12th April the front could be seen on the radar display as a bar of cloud passing away out to sea to the NE, aligned as in the weather map (Figure 2), while in Aberdeenshire the sky was clearing and the wind had died away on the ground. During the morning a small departure was seen to start inland and proceed NE out to sea at about 60 knots until it caught up with the departing front. From the speed of the echoes it would appear that the wind, which had been strong from the SE on the surface ahead of the front, and had died away on the surface behind it, had remained strong and veered SW behind the front at upper levels, and was now assisting the birds. This is confirmed by the 900m upper wind reports for 0600 hrs, the upper wind being 12 knots from 110° ahead of the front at Lerwick, but 25 knots from 220° behind it at Leuchars, the wind speed of 25 knots and their own airspeed of about 30 knots accounting closely enough for the birds' observed groundspeed of about 60 knots.

The passage appeared uniform in appearance and direction

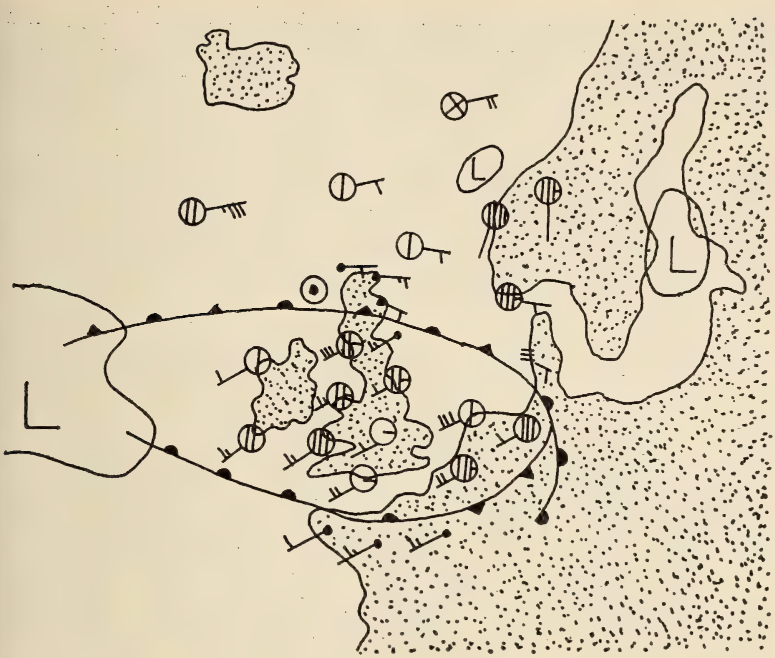

Figure 2. The conditions under which Common Gulls are drifted to Fair Isle in spring, as shown by the weather map for 0600 hrs on 12th April 1959. Birds leaving Britain in fine weather with SW winds behind the northern front flew into the front over the North Sea and were drifted NW to Fair Isle by SE winds under the cloud.

of movement until it approached to within ten miles of the front, and then the echoes started to vary in both brightness and direction. Some eventually disappeared entirely before they reached the cloud, as if they had flown low beneath the radar horizon or settled on the sea, but most continued in directions between north and east until they disappeared from sight among the cloud shadows. Four out of five echoes followed carefully split up as they approached the front, and two of the smaller resulting echoes disappeared before they reached the cloud while another four were watched into the cloud. It was impossible to see what happened under the cloud.

The movement was seen all day as the front disappeared out to sea and the wind increased and swung round to west. A stream of parties of Common Gulls was seen flying north low up the shore at the rate of hundreds of birds per hour in Aberdeenshire during the afternoon, while a few more were seen going NNE very high in Berwickshire by R.McB. There was also an arrival of 120 Common Gulls and no other species at Fair Isle as the front passed during the day, this being one of the largest arrivals of Common Gulls in spring during the whole period of observation there (P. Davis, *Bird Migration* 1:42 and personal communication). Presumably birds setting out in fine weather with a SW wind from the coast of Scotland must have started to drift NW when they met the SE wind under the cloud of the front until they reached Fair Isle; unfortunately it was impossible to see what was happening, but the fact that a considerable fall at Fair Isle this day consisted entirely of Common Gulls provides strong evidence that the passage consisted mainly of this species.

The weather remained fine and clear with SW to SSW winds as the low pressure system moved on NE on 13th April, and a very large NE to ENE departure was again seen on the radar during the morning, though no birds could be seen from the ground in Aberdeenshire, and unfortunately there were no observations in Berwickshire. The departure ceased with the onset of a southerly gale ahead of another front approaching from the west during the afternoon, though some traces could still be seen leaving as long as gaps persisted in the cloud. The front passed on north overnight and the weather had cleared to produce another fine still day with SSW to S winds on 14th April. Another large NNE departure developed on the radar during the day, and I.J.P. saw a trickle of parties of Common Gulls pass calling over Berwickshire throughout the day, most flying so high that they were difficult to see. By the evening the wind was backing SE ahead of another depression, and W.R.P.B. found many Common Gulls sitting about on the ground at Rattray Head in Aberdeenshire.

On the morning of 15th April the weather was again fine with a S to SSE wind after the passage of the front during the night, and another NE departure was seen on the radar display. R.McB. saw no movement at St Abb's Head this day, but in Aberdeenshire W.R.P.B. saw two parties of Common Gulls go very high north up the coast during the afternoon, while 140 were recorded at Fair Isle. Another moderate departure was seen on the radar with SW winds on the 16th, though no visible movement was detected in either Aberdeenshire or Berwickshire, and after this only small NE diurnal departures were seen on the radar until observations ended for the season on 20th May, while no more visible departures of Common Gulls were reported anywhere.

Observations in 1960. In this year observations were carried out in Aberdeenshire from 26th February till 31st May, with a gap from 12th to 18th April when little of interest was reported to have happened except possibly on the last two days; Dr M. T. Myres carried out parallel observations in

Shetland in April and May. A few small NE departures were seen in Aberdeenshire in March, especially on 25th March, but no migrants could be seen leaving. I.J.P. visited St Abb's Head only on 21st March this year, when he saw nothing.

The first important departure was seen on the radar on 4th April, earlier than in 1959 when there was a gap in the records at the beginning of April followed by a period of more or less NW winds which appear to be unfavourable for migration. As in 1959 it occurred in fine weather with a SW wind following the clearance of a front to the east, and was terminated by the passage of another front overnight. It could also be seen on the radar in Shetland as it passed on NE during the afternoon, but nothing could be seen from the ground.

The front was clearing to the east by the morning of 5th April, and another movement started in fine weather with a S veering to SSW wind behind it, the first birds plunging straight into the cloud of the front as it passed out of sight. This front had passed further out to sea before the birds reached it than had that of 12th April 1959, and only two Common Gulls reached Fair Isle this time, though there had been a fall of passerines as the front passed during the night, which suggests that Common Gulls do not migrate at night. The passage was seen continuing NE/NNE past Shetland later in the day. On this afternoon a determined attempt was made to see the birds leaving Rattray Head by looking up through binoculars. 32 gulls were seen and heard going out very high in four parties between 1615 and 1645 hrs; most of them were Common Gulls as usual, but there were one or two Black-headed Gulls *Larus ridibundus* for the first time. Cloud was then beginning to spread from the west as another front approached from the west.

This front passed east overhead on the morning of 6th April, and a small departure left as the weather cleared behind it during the afternoon. The next day was fine and clear with no wind on the ground though SSW winds were reported at 900m and cloud is shown on the weather map (Figure 3). The largest NNE/ENE diurnal departure of the spring was seen on the radar in both Shetland and Aberdeenshire as a ridge passed east during the day, yet no visible migration could be detected at all during another afternoon watch at Rattray Head. A small departure occurred ahead of another front on 8th April, and the last important movement seen in Aberdeenshire this season followed behind it as it passed to the east on the afternoon of the 9th, the echoes disappearing ENE into the cloud as they went out to sea. Common Gulls were heard calling very high overhead as they flew into the cloud, and twenty Common Gulls but no other species reached

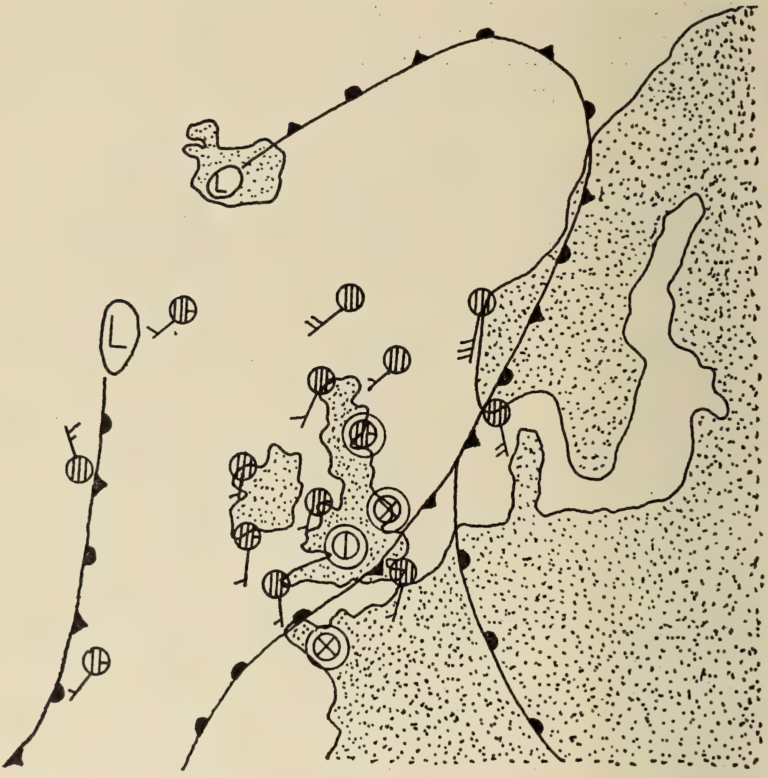

Figure 3. The conditions under which the largest departure of Common Gulls occurred in 1960, as shown by the weather map for 0600 hrs on 7th April. The birds started to leave Scotland when the first front passed east, and departed NNE in very large numbers as the ridge passed during the day. Nothing could be seen from the ground.

Fair Isle as the front passed during the day.

Diurnal departures continued to be seen on the radar in Shetland with a diminishing frequency and density until 24th April, although some were missed in Aberdeenshire owing to the gap in observations there. They then became very sparse and infrequent. No more Common Gulls were seen leaving Aberdeenshire this year.

DISCUSSION

The ringing returns analysed by Dr Radford, the reports of the occurrence and behaviour of Common Gulls at Fair Isle in autumn by Davis and Hope Jones, and visual and radar observations of their spring migrations, can be combined to provide a picture of the movements of the species throughout the year. It prefers to breed near water of some sort along the coast or inland in NW Europe, and migrates to winter along the coast and in agricultural country with light soils in western Europe. The general trend of its migration is apparently more westerly than that of the Black-headed Gull, which moves mainly SW and S (M. C. Radford, *Bird Study* in press), and it seems to cross the North Sea in much greater numbers.

The autumn migration seems to involve a prolonged dispersal west starting according to the Fair Isle records by late June, reaching a maximum from mid August to early September, and dying away about mid November, with recurrences after cold weather in winter (the general summary by Davis & Hope Jones is confirmed by a direct inspection of the records). This autumn dispersal is not conspicuous on radar, though scattered arrivals of echoes of the sort thought to be caused by Common Gulls in spring can occasionally be seen coming in west from the sea late in the day throughout the autumn, mainly during periods of easterly winds. These movements are probably composed of a mixture of Common Gulls and other drift migrants from Scandinavia, so that it is impossible to analyse the Common Gull movements separately, as can be done in spring. In any case, the movements are never very prominent on the screen in the way that they are in spring, so that it seems possible that the birds may fly much lower in autumn when the wind is usually against them, so that they do not show up well on the radar; or alternatively that the autumn migration may always be so weak, diffuse and long-drawn-out that individual passages are never strong enough to show up well.

Although during this period of autumn dispersal the birds cannot be identified easily with radar, Davis and Hope Jones have shown that large numbers none the less appear at Fair Isle under much the same conditions as in spring, S to SE winds associated with fog and cloud and the passage of a front east across the North Sea, while the birds can be seen departing again to the south by day when the weather clears. Dr Radford has also shown that the largest number of returns of foreign-ringed Common Gulls come from Scotland and eastern England at this time, the rings tending to be recovered in England, Wales and Ireland later in the winter, and not in Scotland, even on spring passage. Common Gulls other than breeding birds also seem much commoner feeding along the coast and inland in east Scotland in autumn than spring, though they rarely seem to be migrating, and no migrant flocks were seen which could be associated with movements seen with radar. Thus it appears that there must be a considerable slow movement through the area in autumn, which does not show up well on the radar at all. Most of these birds seem to have passed through by November.

On the other hand, Common Gulls other than breeding birds seem rather scarce in Scotland in spring, and there are few ringing recoveries there then. This can now be explained by the radar observations. While some migration may occur at night in March, when it will be swamped by large passerine departures on the radar display, little migration is seen by day except during a relatively short spell in April, and the migration then occurs in a great rush, the birds taking off far inland during spells of fine weather, and going out high overhead to Scandinavia, so that it is extremely difficult to see them except where they are temporarily grounded by bad weather, usually in the form of a front.

On good days this passage was usually well developed by 1000 hrs, and if they were not interrupted the last birds were still moving out to sea at dusk, when they were lost among the evening passerine departures. If they all took off in the morning and only travelled at their airspeed of 30 knots, the last birds crossing the coast some ten hours after the start of the passage would already have travelled 300 miles before they put out to sea, while on days when they were assisted by the wind, as usually seems to be the case, they could have come twice as far. However, the most distant land in Europe in the direction from which they were coming, Ireland, is only 200 to 500 miles away, so that it seems likely that some at least of the big passages must have come from the winter quarters in western Britain and Ireland since the morning, and should reach Scandinavia, and possibly the summer quarters, by the following day. Thus some birds may complete by a single flight within one or two days a journey which may have taken weeks or months in autumn; others which were grounded on the way by bad weather may have taken longer, but in both years for which there are radar results the greater part of the spring passage of this species seems to have passed within about a week.

A general examination of the movements described in the previous section and summarised in the Table suggests that the birds must wait for a particular type of weather before migrating, all the main movements having occurred during disturbed or cyclonic weather in the relatively fine spell which occurs after the passage of a front, as the wind starts to veer SW in the warm sector of a depression behind the warm front and ahead of the succeeding ridge, and before it starts to back SE again behind the ridge and ahead of the next depression, as in Figures 2 and 3. The birds seem to wait for the onset of these conditions before starting to move, and then keep moving until they catch up with the front. They then probably settle and start again another day if they are over land, but are liable to be blown away north by southerly winds under the cloud ahead of the front if they are over the sea. At least, while fronts were several times seen approaching overland from the west, birds were never seen coming through them, though good passages often occurred after they had passed; while birds were three times seen to fly into fronts at sea to the east, some birds disappearing as if flying low or settling on one occasion, and there was an arrival of Common Gulls at Fair Isle to the north on the two occasions when the fronts passed there in the daytime.

The factor which stimulates the birds to start migrating under suitable weather conditions seems most likely to be the occurrence of a favourable wind, as already postulated for nocturnal migrants seen on radar by W. G. Harper (*Proc. Roy. Soc. B* 149:484). At least, all the main gull passages seem to have occurred with winds close to SSW. Unlike nocturnal migrants the Common Gulls seem quite prepared to migrate under cloud, which is usually marked behind warm fronts, all the large passages occurring on days when a considerable amount of cloud was shown on the weather maps. Possibly these and other diurnal migrants are less dependant on celestial navigation than nocturnal migrants, which usually seem to move with clear skies, as suggested by Harper. There was a marked variation in the local morning temperature on the days when birds passed; it was usually high, when they were following a simple warm front, but sometimes low, once with a very big passage (Figure 3), probably because the front had already occluded before it crossed the British Isles. Taken at their face value, these observations suggest that temperature as such has little influence on this migration; but the temperature in the area of origin of the passage or at a different time of day may be more important than that which the birds encounter in intermediate areas during the course of their flight.

The character of the spring migration of Common Gulls seems to depend largely on the time of onset of suitable weather conditions in early April. In 1952 and 1960, when a series of depressions followed by SW winds passed early in the month, the birds went out high and fast early in the season and little was seen of them. In 1959, when winds north of west prevailed early in the month, the main passage seems to have occurred later, one or more passages hitting fronts as they went out, so that more birds were seen along the coast and at Fair Isle. In 1957, when more or less NE winds prevailed in early April, visual observations suggest that the birds may have gone out in a great rush when the wind eventually backed to west on the 13th.

A similar slow dispersal in the last half of the year followed by a sudden flight back to the breeding area in spring has been postulated for the Mediterranean Gull *Larus melanocephalus* by N. Mayaud (*Alauda* 22:225) and the Slender-billed Gull *Larus genei* by C. Erard (*Alauda* 26:86) and may occur among other allied species. It may occur with the Black-headed Gull, though here the picture is often confused because a number of different populations may pass through the same area at different times; none the less, most Black-headed Gull colonies seem to be occupied suddenly in spring, as if the migration occurs very rapidly. Lesser Black-backed Gulls *Larus fuscus* also seem to migrate in large numbers during a rather short period in the spring. This subject deserves further study.

SUMMARY

1. Large numbers of Common Gulls, and only Common Gulls, were seen visually departing NNE by day from the east coast of Scotland during a short period in April in several different springs. This movement was watched with radar in April 1959 and 1960.

2. The birds move on a broad front inland but tend to follow the coast to headlands before putting out to sea. Thus relatively concentrated departures took place from prominent headlands such as St Abb's Head, Rattray Head and Duncansby Head.

3. In fine weather most flocks fly too high to be seen. A number of flocks were seen resting on the ground, passing low overhead, or coasting north low along the shore when the weather deteriorated.

4. Birds which left land in fine weather were seen to meet a front out at sea on three occasions. On two of these they flew straight into the cloud and were lost to sight. On the third flocks were seen to change direction, break up, and in some cases disappear as if flying low or settling on the sea as they approached the cloud. There was an arrival of Common Gulls, and only Common Gulls, as two of these fronts passed Fair Isle by day, while the third passed by night and brought passerines but no Common Gulls, indicating that the diurnal movements seen with radar must involve mainly Common Gulls, and the nocturnal movements not Common Gulls but passerines.

5. Common Gulls appear to disperse slowly from the breeding area, and then return rapidly, probably often by a single flight. In spring they appear to migrate during the spell of fine weather and westerly winds which follows the clearance of an eastwards-moving front. The factor stimulating them to migrate may be the onset of a favourable wind; they often migrate under cloud, and with variable temperatures. If they meet bad weather they try to settle and wait for it to clear, but at sea they are liable to be drifted north by south winds ahead of a front, and may appear at Fair Isle then.

TABLE

Weather and visible movements during main gull departures seen on radar

Time/Date		Passage		Wind in knots		Eighths	Temp.	Movements noted		
				900m	Ground	Cloud	(°F)	Berwick	Aberdeen	Fair Isle
April 1959										
p.m.	10th	Some	NNE	SW/9	0	7	42	0	0	13
a.m.	11th	Some	NE/NNE	WSW/6	0	Mist	38	some	0	2
a.m.	12th	Some	NE	S/20	SE/10	Rain	43	some	many	120
a.m.	13th	Many	NE	SSW/20	SW/10	7	47	?	0	100
a.m.	14th	Many	NNE	SSW/26	S/5	7	47	some	some	8
a.m.	15th	Some	NNE	SSE/27	S/5	Rain	47	0	few	140
a.m.	16th	Some	NE	S/12	SSE/?	Fog	43	0	0	0
April 1960										
p.m.	4th	Few	NNE	S/29	S/10	8	43	?	0	0
p.m.	5th	Some	NE	SSW/36	SSW/10	7	53	?	some	2
a.m.	6th	Few	ENE	SSW/45	SSW/20	7	47	?	0	0
a.m.	7th	Many	NNE	SSW/12	0	7	36	?	0	0
a.m.	8th	Few	NE/ENE	SSW/23	S/10	7	44	?	0	1
a.m.	9th	Some	ENE	SSW/25	S/10	Rain	46	?	some	20

Notes. The first passages came through late in the day, so weather readings at 1800 hrs are given for these, and thereafter readings at 0600 hrs. The upper winds are the average of Lerwick to the north and Leuchars to the south, and other readings are from Dyce, Aberdeenshire.

ISLE OF MAY BIRD OBSERVATORY AND FIELD STATION REPORT FOR 1961

PREPARED FOR THE OBSERVATORY COMMITTEE

by W. J. EGGELING, *Hon. Secretary,*
and A. MACDONALD

The Low Light was manned for 196 days between 17th March and 5th November, a gratifying increase on previous years. Both migration seasons were satisfactorily covered but there was once more a dearth of accredited ringers in June and July so that again very few nestlings were ringed.

In the Report for 1960 a field identification of an Arctic Warbler on 26th August 1960 was accepted as providing a new bird for the island's list. However, although the notes taken at the time pointed clearly to this species, the principal observer was not satisfied after an examination of museum skins that it was in fact the bird involved and, accordingly, the record was withdrawn. In 1961 an indubitable Arctic Warbler was identified on 5th-6th September and this now constitutes the first undisputed occurrence. Other notable records for the year include the island's first White-breasted Barn Owls *Tyto a. alba*—one in June and two others in October; only the second occurrence since 1910 of Bullfinches—on 20th-21st October, two birds of the Northern race *P. p. pyrrhula;* the third spring occurrence of Shore Larks—two from 25th April until 7th May; and the island's third Yellow-breasted Bunting on 7th October.

A pair of Hedge Sparrows bred for only the second time since 1884 and there was a further appreciable increase in the number of breeding Shags. No Linnets nested and there was no attempt at breeding by any species of tern.

MIGRATION

Spring

The Station was manned from 17th to 22nd March, when a few Song Thrushes and Blackbirds were present, and small numbers of Meadow Pipits were moving. Two Iceland Gulls and a cock Wheatear were seen on 17th, a Yellowhammer on 18th, and a Black Redstart on 20th and 21st. Observers were back on the island on 30th March and the only gaps in spring cover were at 7th-9th April, 2nd-4th May and 25th-29th May. There was little movement in the first week of April but on the 11th, with light easterly winds dropping to calm with fog, 200 Wheatears, 50 Willow Warblers and 50 Goldcrests, accompanied by a few Chiffchaffs and Redstarts, a Tree Pipit and the first Swallow, were noted. Birds continued to trickle through steadily, amongst them a Hoopoe on the 18th, and the first 2 Blackcaps and a Garden Warbler on the 20th. From then, with the wind south-east, until the 24th, when it moved into the south-west for a day, small numbers of migrants passed through, including on 21st the only Grasshopper Warbler of the year. In the last week of April, although the wind was still easterly, even fewer birds were seen; there was a Pied Flycatcher on 27th, the first Sedge Warbler on 28th, and a Black Redstart and a Quail on the 30th. Two Shore Larks (one trapped), first noted on 25th April, remained until 7th May.

No movements of any real size were recorded in May, when Willow Warbler numbers reached the 20-25 mark only on 6th-7th and 22nd. The first Cuckoo appeared on the 6th and the first Spotted Flycatcher on the 7th. The highest total of Whitethroats was 20 on the 22nd, when 7 Sedge Warblers, 4 Spotted Flycatchers, a Pied Flycatcher and the only Bluethroat of 1961 were noted. There was so significant movement thereafter.

Autumn

The Low Light was occupied from 21st July to 5th November, with gaps only at 1st-3rd and 7th-9th August, and 15th-19th and 28th-30th October. Except for a Turtle Dove on 27th-28th July, there was little to record until 10th August, when the incoming party found 20 Willow Warblers and a Pied Flycatcher on the island, and at least 3 Green Sandpipers and a Greenshank. A Great Skua was seen on the 11th, tern movements began to be noticeable on 13th, and the first south-moving Arctic Skua appeared the same day. Passage remained unexciting during the second half of the month, although a Treecreeper was seen on 28th and a fresh south-east wind on the 29th brought in 5 Pied Flycatchers—but not much else.

September opened auspiciously with easterly winds and poor visibility or fog for the first five days: 8 Pied Flycatchers appeared on the 1st and were replaced overnight and again on the 3rd by others; 14 in all were trapped, together with a single Barred Warbler. Arrivals on 4th September (wind north-east, veering south-east) included 75 Wheatears, 4 Whinchats, a Blackcap, 3 Garden Warblers, 12 Whitethroats, 20 Willow Warblers, 5 Goldcrests, 30 Pied Flycatchers, an immature Red-backed Shrike and a Turtle Dove. This movement continued on the 5th, when Whitethroats increased to

30 and Willow Warblers to 120; Pied Flycatchers fell to 25 and Wheatears remained at 75. An Arctic Warbler was seen.

A few more Goldcrests and a Treecreeper (trapped and identified as of the British race *C. f. britannica*) turned up on the 8th, and the continuing dribble of movement was augmented on 10th-11th by heavy early morning passage of Swallows and House Martins, which reached a peak of over 1,000 of each on 11th and then stopped. Pipits, too, were moving. Another (British) Treecreeper and a Lesser Redpoll were trapped on 14th.

A small influx on 19th September, in fog with light south-east wind, included 6 Redstarts, 8 Pied Flycatchers, a Garden Warbler, a Lesser Whitethroat and 40 Siskins. On the 21st, 500 Swallows and 17 *alba* Wagtails were recorded, passing over high. There was a Lapland Bunting on 24th (wind between north-west and west) and, unexpectedly, a Yellow-browed Warbler on 25th (wind west).

The first sizeable arrival of Turdidae was on 30th September (south-east wind, veering south-west), when 40 Song Thrushes, 2 Ring Ouzels, a Fieldfare, a Redwing, 7 Lapland Buntings, 2 Blackcaps, and one each of Treecreeper, Pied Flycatcher, Brambling and Siskin came in. On 3rd October, 120 Song Thrushes, 15 Blackbirds, 6 Redstarts, 6 Blackcaps, 2 Garden Warblers, and a few Willow Warblers and Chiffchaffs were present. On the 4th, the start of a spell of fog and south-east winds which lasted four days, Robin numbers rose from 2 to 20, Skylarks from 4 to 20, and Chaffinches from 20 to 50; a Black Redstart was seen. Over 400 Song Thrushes and more than 100 Blackbirds arrived on the 5th, along with the first Woodcock and 2 Little Stints. On the 7th, a Yellow-breasted Bunting was identified. Most of these birds had gone when the fog lifted on the 8th, but 30 Bramblings and 3 Stonechats came in next day, and 40 and 100 Meadow Pipits were recorded on 11th and 12th, respectively. An increase of Skylarks from 7 to 40 took place on 12th, about 50 Redwings were seen on the 13th, and 2 Long-tailed Tits appeared on 14th.

On 20th October, after an observer-gap from 14th to 19th, the wind veered north-north-east, force 6, and brought a heavy arrival of continental birds with at least 600 exhausted Goldcrests predominating but also small numbers of Blackbirds and Fieldfares, a Blackcap and two Bullfinches (one of which was trapped and found to be Northern). About 50 Redwings arrived on 21st, and next day, in mist and south-east wind, 200 Blackbirds, 150 Redwings, 60 Song Thrushes and 2 Ring Ouzels were logged, along with 25 Chaffinches, 25 Skylarks, 5 Siskins and a Black Redstart. Two more Black Redstarts, a Short-eared Owl and a Yellowhammer were seen on 24th, and 3 Long-tailed Tits on 27th.

Observers landing on 31st October to close the Station recorded Redwings and Blackbirds moving overhead in mist and light south-east wind. 1st November saw the successful trappings by the Principal Keeper of a party of 11 Long-tailed Tits, a count of 25 Wrens and a brief visit from 5 Grey Lag Geese. Next day, 150 Fieldfares, 100 Redwings and a very late Redstart appeared. There was again considerable Blackbird activity on the 4th (250 recorded as against 12 on 3rd) and a Glaucous Gull was seen. On 5th November, the last day of the season, fully 1,000 Fieldfares, 1,000 Redwings, 500 Blackbirds and 3,000 Starlings, but only a handful of Song Thrushes, were reckoned to have gone by in a day of really heavy passage. Twelve Woodcock were recorded also, and 8 Black Guillemots.

UNUSUAL OCCURRENCES

The following are particularly deserving of notice:—

Manx Shearwater: 9 and 6 respectively on 21st and 22nd July. Only one previous record for July.

Quail: Adult male on 30th April. Sixth occurrence; fifth and earliest in spring.

Woodcock: Single birds, perhaps the same, on 14th and 17th June. First June record.

Whimbrel: 10 on 31st August (unusually many); last bird of autumn on 10th October (exceptionally late).

Bar-tailed Godwit: 1 on 12th-13th September. Seventh occurrence.

Green Sandpiper: Either 3 or 4 on 10th August. Unusually many.

Spotted Redshank: 1 on 24th September. Recorded in only two other years.

Greenshank: 8 occurrences of single birds between 10th August and 1st October. Unusually many.

Little Stint: 2 on 5th October. Recorded in only five other years.

Glaucous Gull: 1 on 4th November. Fourth November occurrence.

Iceland Gull: 2 on 17th March. Recorded in only four other years.

White-breasted Barn Owl: Single birds in June and on 6th and 18th October. The June bird was caught unable to fly on 24th, dying in the afternoon. It had been present for a few days, growing progressively weaker.

Short-eared Owl: Single birds on 11th, 14th and 22nd August. Unusually early dates.

Hoopoe: 1 on 18th April. Seventh occurrence.

Shore Lark: 2 from 25th April to 7th May. Third spring record.

Long-tailed Tit: 2 on 14th October, 3 on 27th October, 11 on 1st November. Recorded in only five other years.

Fieldfare: Single birds on 5th and 9th June. Very late.

Ring Ouzel: 10 on 6th April. Unusually many.

Stonechat: 1 on 16th April, 1 on 27th-28th July (a very unusual date), 1 on 24th September, 3 on 9th October (unusually many). More occurrences than has been usual in recent years.

Whinchat: 1 on 19th June. A very late date.

Redstart: 1 on 2nd November. Exceptionally late.

Black Redstart: 1 on 24th July. A very strange date.

Robin: Single birds on 1st June (very late for spring passage), 26th July (second July occurrence), and first week of August (early for autumn passage).

Sedge Warbler: 1 on 22nd July (an early date), 1 on 8th October (a very late date).

Blackcap: 2 on 20th April (early), 1 on 3rd-4th June (late).

Garden Warbler: 1 on 20th April. Again an early date.

Arctic Warbler: 1 on 5th-6th September. First undoubted occurrence.

Goldcrest: Single birds almost daily in August from 10th to 25th (probably only two individuals concerned); exceptionally early. Over 600 on 20th October; exceptionally many.

Starling: 3,000 passing on 5th November. Exceptionally many.

Greenfinch: 1 on 13th-14th June. Very unusual in June.

Goldfinch: 1 on 4th November. Recorded in only 7 other years.

Lesser Redpoll: Single birds on 14th and 18th September, 31st October and 1st-3rd November. Only five previous certain autumn occurrences.

Bullfinch: 2 (Northern race) on 20th-21st October. Only two previous occurrences of Bullfinches.

Yellow-breasted Bunting: 1 on 7th October. Third occurrence.

Lapland Bunting: 7 on 30th September. Unusually many.

BREEDING POPULATIONS

A pair of Swallows nested in the Naval Hut, raising a single brood. The female then laid in three different nests which she sat on indiscriminately without success. Two pairs of

Pied Wagtails were present for part of the summer but it is probable that only one pair bred, raising two broods. The female of this pair, ringed on 28th April and retrapped on 22nd July, was found dead in Portugal on 24th November. For the first time since 1953 no Linnets nested but in partial recompense a pair of Hedge Sparrows raised at least seven young in two broods.

The seabirds had mixed success. No terns at all nested and the 200-300 Puffins which excavated burrows on the East Side again failed to establish themselves. It is difficult to believe that gulls were entirely responsible, since no predation was observed. The Shag population again increased and as 526 nests were counted in the last week of April it is probably safe to conclude that, making allowance for dead ground, at least 550 pairs bred. The area of cliff occupied by Kittiwakes continues to expand; there were 34 nests in the recently formed East Tarbet colony (25 nests in 1960; 18 nests in 1959) and for the first time there was a nest on the Maiden Rocks.

RINGING AND RECOVERIES

The number of birds ringed, 1,666, was much the same as in 1959 and 1960; once again relatively few nestlings were involved. Two species were added to the ringing list—one each of Shore Lark and Bullfinch. Record totals were obtained of Wrens (43), Long-tailed Tits (11) and Treecreepers (5), and second-highest totals for Rock Pipits (100), Kittiwakes (61) and Hedge Sparrows (29). Low totals were those for Linnets (2) and Garden Warblers (9). The large number of Rock Pipits ringed, all but three free-flying, was largely due to the discovery that the Crow Trap is quite irresistible to them if kept freshly dug over and baited with bread crumbs. When in a weedy or grassy state, it catches little.

There were few re-trappings of note. Two of them show that at least one Blackbird and one Song Thrush overwintered from November 1960 until the spring of 1961, the first time that a Song Thrush has been recorded to overwinter since the species was breeding on the May before the Second World War. It is also of interest that a Whitethroat (AB. 12553), ringed on the island on 22nd May when on northward passage, was trapped there again on 6th September, on its way south.

A Fulmar ringed on the island as a breeding adult in 1949, and two others ringed as breeding adults in 1952, were still nesting in 1961. Another indication of the considerable age attained by certain seabirds is given by the first of the following records of birds ringed on the May recovered elsewhere in 1961:—

	Ringed	Recovered
Arctic Tern. XL. 304.	Ad. 13.7.47.	Tentsmuir, Fife. 20.6.61.
Blackbird. S.86363.	Ad. ♂ 10.11.58.	Tingvoll, Norway. 12.4.61.
Blackbird. R.35619.	F.G. ♀ 6.4.60.	Deje, Sweden. 3.4.61.
Blackbird. R.35749.	F.G. ♀ 5.4.60.	Near Einbeck, Germany. 1.3.61.
Whitethroat. AC.13531.	F.G. 19.9.61	Chaillevette, France. 4.10.61.
Garden Warbler. J.88614.	F.G. 27.8.60.	Oundle, Northants. 23.5.61.
Willow Warbler. AB.12974.	F.G. 5.9.61.	Near Vagos, Portugal. 23.10.61.
Spotted Flycatcher. AB.12563.	Ad. 24.5.61.	Berlanga, Spain. 1.10.61.
Hedge Sparrow. C.64663.	Ad. 19.3.58.	Bass Rock, East Lothian. 13.10.61.
Meadow Pipit. AB. 12536.	Ad. 10.5.61.	Sanlucar de Barrameda, Spain. 21.11.61.
Rock Pipit. C.64161.	Pull. 22.5.57.	St Andrews, Fife. 19,2.61. (retrapped 22.7.61).
Pied Wagtail. AA.58794.	Ad. ♀ 28.4.61.	Salvaterra de Magos, Portugal. 24.11.61.

An immature Greater Black-backed Gull, ringed as a young bird on 7.7.60 near Nigg, Ross-shire, was recovered on the May on 31.3.61, dead for some weeks.

MISCELLANEOUS OBSERVATIONS

In 1960 it was estimated that there were probably about 800 rabbits on the Isle of May at midsummer, and certainly not more than 1,000. In 1961 the population was undoubtedly much larger, and in a period of less than three months in late autumn the Principal Keeper accounted for nearly 600, without very noticeably reducing their numbers. In the absence of sheep the rabbits had the grazing to themselves.

In February and March, six more young Grey Seals which had been marked as pups on the Farne Islands the previous November and December, were caught and released on the May. Grey Seal numbers, generally, showed little change. A pup was born at the South End on 25th October, finally taking to the sea towards the end of November.

Major improvements to the Observatory effected during the year were the complete gutting and re-lining of the living room at the Low Light, the interior re-decoration of the whole building, and the erection and furnishing of a new Ringing Hut. The cost of the first of these operations was met by another generous grant from the Helena Howden

Endowment Trust for which the Committee again express their appreciation. The re-decoration of the Low Light was carried out in its entirety by two working parties organized by the Conservation Corps of the Council for Nature, drawn from students and teachers from the Moray House College of Education. They did a first-class job of which they can be justifiably proud, and they left as a parting present some fine new fitted shelving in the kitchen. The Committee, and all who have since used the Observatory, are deeply grateful: the Station is now in better shape and better equipped than ever before. In the latter connection the gift of a pair of naval type 7 x 50 binoculars from Mr Lachlan J. MacInnes is recorded with special thanks.

REVIEWS

THE BIRDS OF THE BRITISH ISLES. Vol. X. By David Armitage Bannerman, illustrated by George E. Lodge. Edinburgh, Oliver & Boyd, 1961. Pp. x + 320; 23 colour plates. £3, 3s.

It is almost as unnecessary to comment on the scope and manner of presentation of each successive volume of "Bannerman-Lodge" as it is impossible to continue to find fresh and untried expressions of praise for the author and his work. It is only as we receive and study the later volumes that we begin to realise fully the spirit and determination of the man who in 1953 produced the first chapters of his "authoritative work, planned on original lines, and written in such a manner that it should be readable" and realise, too, how successful he has been.

The author continues his practice of inviting contributions from acknowledged authorities on regions, species or taxonomic problems and, as if having profited from previous exercise in the art, casts his editorial net widely and skilfully. The contributed passages have a uniformly high standard of content and provide an interesting and refreshing variety of styles, the elegant and finely polished writing of Dr H. M. S. Blair contrasting with the more exhilarating manner of Professor G. M. Sutton, whose chapter on the Solitary Sandpiper is one of the finest in the book, and with the slightly ostentatious, though masterly, passages by the Nethersole-Thompsons. One short section of outstanding interest, which many will read with envy and not a little regret, is Captain J. H. MacNeile's description of the breeding of the Green Sandpiper in the primaeval forest bogs of Estonia.

The volume begins with the Broad-billed Sandpiper, concerning which Dr Blair gives a great deal of interesting information. Collectors are blamed for its extermination on the sanctuary at Fokstumyren in Norway, but its range appears to be contracting also in Sweden. In North Russia its distribution is still incompletely known, as is that of the Common Sandpiper in south-west Europe. A very attractive and realistic plate of a Wood Sandpiper mobbing from the tip of a spruce accompanies the section on that species, and whereas Desmond Nethersole-Thompson testifies to the regularity with which the Green Sandpiper appears in Inverness-shire during the breeding season, Dr Bannerman is extremely cautious about accepting the record of breeding in that county in 1959.

The chapters on the Greater and Lesser Yellowlegs—Dr Bannerman prefers the time-honoured "Yellowshank"—had been promised by the late Professor Rowan, but have been contributed by his great personal friend Thomas E. Randall, while that on the Greenshank is in its entirety by Mrs Carrie Nethersole-Thompson, who with her husband has the remarkable record of having seen one hundred and seventy-six Greenshanks' nests. The question of the races of the Ringed Plover is discussed at length: it would have been interesting to hear Dr Bannerman's views on the form breeding in Spitsbergen, which is stated in *The Handbook* to be *C. h. hiaticula* but which is probably an inter-grade between *hiaticula* and *tundrae,* but Spitsbergen is not mentioned at all as being in the breeding range of either. He disagrees with *The Handbook* by giving specific rank to the Semipalmated Plover, but this is in accordance with Professor Sutton's observations that, although the breeding ranges overlap on Baffin Island, no specimen showing any suggestion of intergradation has yet been collected. The position of the Kentish Plover as a breeding species in Britain is precarious in the extreme, but on the other hand almost a hundred pairs of Little Ringed Plovers were located in 1959, twenty-one years after the first nest was discovered.

The lead of the editor of *The Scottish Naturalist* is followed in retaining a binomial for the British population of the Golden Plover, and the interesting point emerges that Dr Blair describes a behavioural distinction between the two races in Norway. The Nethersole-Thompsons' essay on the breeding behaviour concludes an essentially Scottish chapter. The statement that Jourdain met with the Golden Plover in Spitsbergen requires amplification as this is an interesting record. In 1921 Jourdain saw a pair, of which the male was shot, on Bear Island, and later a second pair which he thought was breeding; there was no subsequent record from either Bear Island or Spitsbergen until 1950 when Lövenskiold recorded two on the latter. Dr Bannerman does however draw attention to the serious need for an authoritative book on the birds of Spitsbergen—which Dr Lövenskiold promised us years ago.

Dr Blair and the Nethersole-Thompsons again steal the chapter on the Dotterel—ninety-seven nests this time—but with the Black-winged Stilt we find Dr Blair in a new and unexpected habitat. Avocets in Suffolk give contrast in a very Scottish volume, with a full and up to date account by Philip E. Brown, and the Oystercatcher closes the volume, with some of John Buxton's conclusions from his recent enquiry and another series of fine and original observations by Desmond Nethersole-Thompson, vividly interspersed with sex and exclamation marks.

A few curiosities which attract attention cannot be ignored entirely. Dr Bannerman treats Scandinavian orthography with a disdain for consistency which would delight the heart of Meinertzhagen or T. E. Lawrence; "fåglar" becomes, at random, "fåglar," "fäglar" or "faglar", and many place names receive similar treatment. A reference on page 190 to a book called "Days with Rarer Birds," attributed to Eliot Howard, provides a puzzle, and what a "Yellow-headed Bunting" (page 228) might be is anyone's guess until the original reference is checked.

The plates by George Lodge are of the usual high standard, but are not intended to be text-book illustrations for identification purposes. There are many persons to whom it would be of interest to know the dates of the individual paintings, and such a list might be included in the final volume, if these are known.

It is gratifying to know that Volume XI is not far from publication, and that the final volume is in active preparation, so we may look forward to an early completion of this magnificent work which comes from a great Scottish publishing house without whose courage and enterprise we might be without some of our finest modern bird books.

I. D. PENNIE.

DOWN THE LONG WIND. By Garth Christian. London, Newnes, 1961. Pp. 240; 31 plates; 23 maps. 21s.

Publishers who claim for their books more than the authors intended may do the latter a lasting disservice. *Down the Long Wind,* A Study in Migration, is a case in point. Written, according to its dust cover, primarily for the general reader of all ages, it is hailed too as a brilliant study which will be welcomed not only by the amateur bird-watcher and schoolboy naturalist but also by the professional ornithologist seeking an up-to-date account of the migratory movements of a host of British birds.

I cannot agree that this book is the landmark in the history of bird study which its Introduction suggests, nor do I consider that it will be of particular interest to the professional who is within reach of the original papers from which so much of the information has, with full acknowledgment, been drawn. Nevertheless, after having said that, one can welcome *Down the Long Wind* as providing a clearly presented, very readable, "share this knowledge with me" account of the migrations of many of our birds. It can be recommended unreservedly to the amateur bird-watchers, schoolboy naturalists, armchair enthusiasts and general readers of its blurb, but especially it should be in the hands of school teachers and lecturers—indeed of anyone who is seeking to interest children and others (but especially children) in nature study and biology.

Mr Christian is a conservationist as well as an ornithologist and his book is concerned with many other things besides migration. He sees his birds as living creatures in a natural setting, not as a list of names.

W. J. EGGELING.

BIRD DOCTOR. By Katharine Tottenham. Edinburgh, Nelson, 1961. Pp. 162; 15 photographs. 15s.

In this pleasant, conversational book Mrs Tottenham tells you that the care of sick, wounded and oiled birds, started almost accidentally, has developed with her into a time-absorbing occupation. She now has a bird-larder ready for all emergencies and has treated patients as different as a Magpie and a Ruff. With her, however, all is not simply chat: she has taken the trouble to learn about the anatomy of birds and their physiology, with the result that the book is full of useful tips to those looking after ill birds—to make leg-splints out of quill feathers, for example. She keeps a record of her cases, her failures being as low as twenty per cent. She saves life where she can, but acknowledges the occasional necessity of killing the bird. It is a sad reflection that, while Mrs Tottenham is working so hard to heal creatures, it is her fellow humans that are responsible for most of the casualties.

This book is especially to be recommended to "the local expert" in the country, the man who is always having sick birds brought to him.

M. F. M. MEIKLEJOHN.

SHORT NOTES

LITTLE EGRET IN SHETLAND

On the 11th June 1961 a Little Egret *Egretta garzetta* was seen by two English boys between Loch Spiggie and Loch Brow, Mainland, Shetland. We had a brief view of it the same evening, it was seen by others on the 12th and on the 13th we had fine views from about fifty yards. It was an all white heron with black legs and yellow feet, black bill with pale base to lower mandible, and no apparent crest. The weather conditions were excellent.

R. J. Smith, John Swan, James Young.

(A Little Egret was reported from Orkney on 31st July 1961 and a week thereafter (*Scotsman* 22nd August). We have not received details of this bird.—Ed.).

MORTALITY AMONG YOUNG PINK-FOOTED GEESE

During November 1961 several cases of exhausted or dying Pink-footed Geese came to my notice. Two such cases were found in Aberlady Bay on 12th November, both of them birds of the year and extremely weak. One, which was caught, succumbed shortly afterwards. Expert post-mortem examination revealed no sign of organic disease or injury though there was considerable wasting. This individual weighed only 2 lb. 10 oz.

It seems possible that we have here an example of "shock disease," first described by Evans and Green (*Journal of Wild Life Management*, Vol. IV) in their study of the Snowshoe Hare. The condition is thought to follow peak-population years and to be in some way connected with overcrowding on the breeding grounds. The non-viability of the offspring may, however, be delayed until the second or third generation. In view of the apparent increase in the numbers of Pink-feet wintering in this country in recent years, it would be interesting to know whether other observers have come across cases similar to those described above.

W. Kenneth Richmond.

(Shock-disease is thought to be due to the exhaustion of the adreno-pituitary system under the increasing pressure on food supplies and territories and the consequent disturbance and competition between individuals when population is unduly high. It probably accounts for the well-known fluctuations in vole numbers and possibly also for the explosive migrations of the Arctic Ptarmigan populations in years of peak density. It seems unlikely that migratory birds—and especially geese which are sociable by nature—should be affected by the stresses which produce this disease, but Mr Richmond's suggestion is an interesting one and other observations would be welcome.—Ed.).

A BUZZARD LOST IN EDINBURGH

On 9th November 1961 Mrs McInnes of Northfield, Gilmerton, phoned 21 Regent Terrace to say that she had in her loft a hawk of some kind which she had caught on the South Bridge in Edinburgh. Upon investigation the following day by Mr and Mrs George Waterston and myself the bird proved to be an immature Buzzard, apparently unharmed and in good condition. According to Mrs McInnes, she was walking with a friend down the South Bridge when they saw the bird flying low up the street over the traffic. It tried to land on the roof of a car but slid off on to the pavement. It then took refuge in the doorway of a shop, where it was captured by Mrs McInnes who put it under her coat and took it home on the bus! I took the bird back to Milton Bridge for a feed. Next day it was taken out to Silverburn and released. It flew off strongly and, after circling over the moor, disappeared towards the south. It had been foggy in Edinburgh and this may have accounted for the bird's appearance in such unlikely surroundings.

Margaret Mylne.

SPOTTED CRAKE IN MIDLOTHIAN

On 20th July 1957 I flushed a bird from a ditch beside a thick reed-bed at Gladhouse Reservoir, Midlothian. When it first rose (almost at my feet but slightly to my left) my immediate reaction was "juvenile Starling" but it gained eye-height almost immediately, showing the typical short round wings and long drooped legs of a rail before dropping into the reeds.

It was in view for only a few seconds and the impression given was of an olive-brown (with perhaps darker brown wings) Starling-sized Moorhen. It was much too small for a Water Rail and the short bill ruled out even a three-quarter grown bird of this species. The bird was tentatively identified as a Spotted Crake but, as I had no experience of this or the two smaller crakes, I decided to place the record in square brackets.

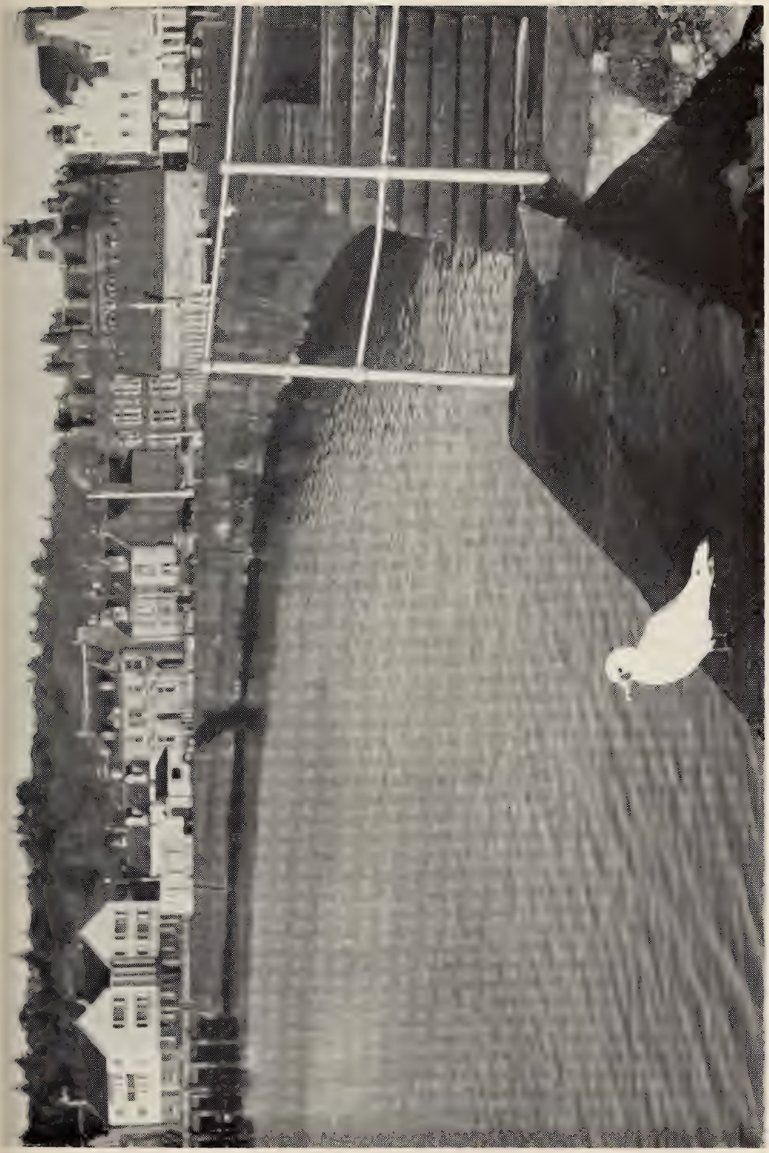

PLATE 1. Immature (1st winter) IVORY GULL, Stornoway, November 1961 (see page 34).

Photograph by W. A. J. Cunningham.

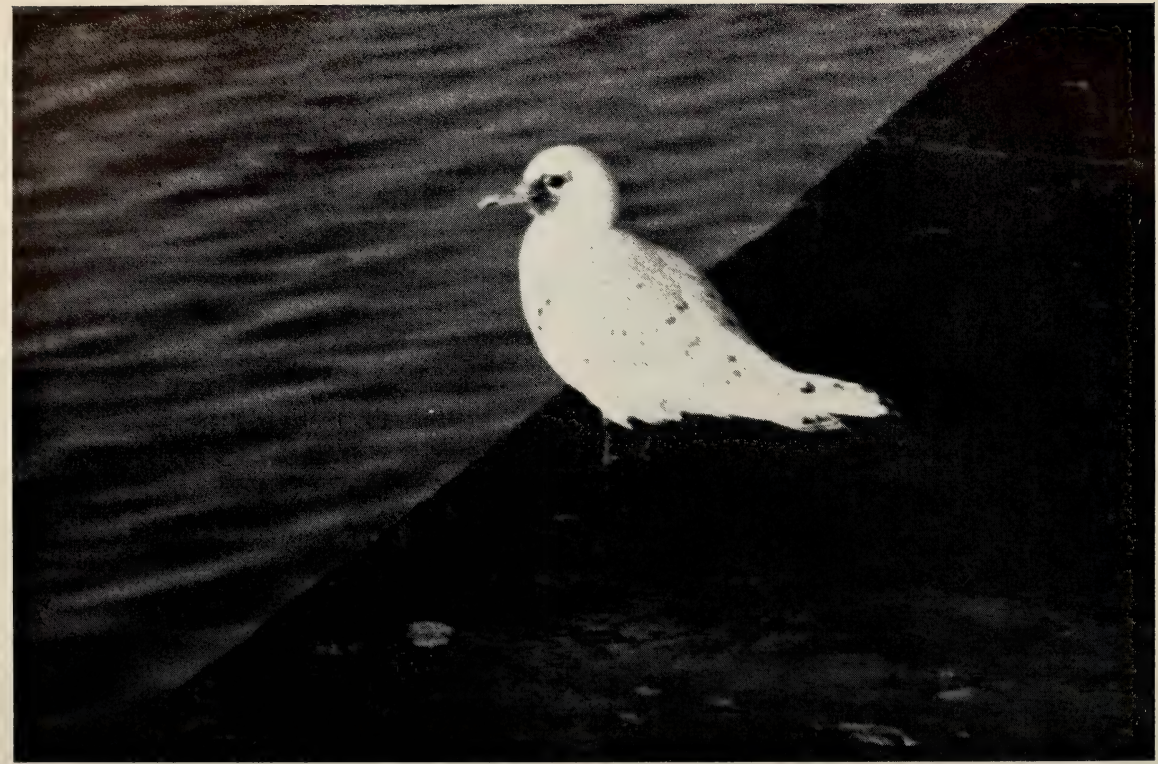

PLATE 2. Immature (1st winter) IVORY GULL, Stornoway, November 1961. An enlargement from part of Plate 1. Note the dark wingtips, dark markings on the lores and chin, and the spotting on the wings.

Photograph by W. A. J. Cunningham

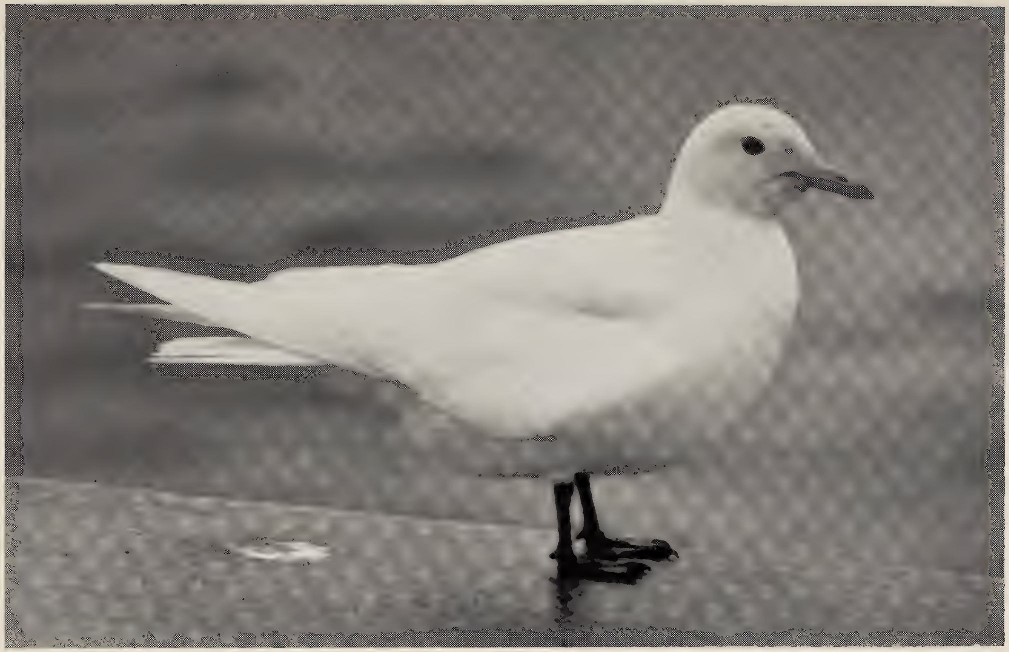

Plate 3. Adult **Ivory Gull**, Scalloway, 8th February 1962. Contrast the clean white plumage with the speckled and dirty-faced appearance of the immature bird in Plate 2 (see page 34).

Photograph by J. Peterson.

Recently I was able to handle and compare specimens of the Little and Baillon's Crakes and Spotted Crake, Corncrake and Water Rail. The Little and Baillon's are strikingly smaller than the Spotted Crake, being nearer the size of a Greenfinch rather than Starling size. Bauer writes (*British Birds* 53:521) that the Spotted Crake "looks (and is) considerably heavier, more stockily built and rather rounder-bodied than the nearly always very sleek-looking Little and Baillon's." I am now convinced that the bird I saw was a Spotted Crake.

As the date of the record seems rather early for autumn passage, it seems worth while drawing attention to two published records (*British Birds* 51:78). Dead Spotted Crakes were found in Oxfordshire on 17th July 1957 and in Cheshire on 20th July 1957, possibly having been killed by hitting traffic and a wire respectively.

The Gladhouse bird may have been concerned in a movement that brought over these other birds, though the Editors of *British Birds* imply that the English birds may have been breeding locally. The weather at Gladhouse on 20th July 1957 was "low cloud, rather hazy with a light east wind and occasional thin drizzle."

R. W. J. Smith.

SHELL STRIPPED FROM COOT'S EGG

At Gladhouse Reservoir, Midlothian, on 11th June 1961 I put a Coot off a clutch of 4 eggs (which had originally been found on 21st May). The eggs were warm but one of them had three-quarters of the shell stripped off, leaving only the small end of the egg covered. The inner membrane was intact and the apparently fully-grown embryo appeared to be alive and healthy. It seems fairly certain that one of the parent Coots was responsible for picking off the shell. I was unable to make any further observations. This seems to be an uncommon behaviour.

R. W. J. Smith.

IVORY GULLS IN LEWIS AND SHETLAND

About 6th November 1961 an immature Ivory Gull arrived at Stornoway. It consorted with and occasionally attacked the resident Black-headed and Herring Gulls from its own vantage point on the quay wall. There have been old records of this species in the area but this is the first occurrence I have known of within recent times, which is odd considering the prevalence in winter of wandering Glaucous and Iceland Gulls.

I was puzzled at first by the all-white plumage with its stray blackish markings, dark cheeks and chin, black eyes and legs, and the long white primaries with black mirrors projecting beyond the tail with its faint black edge. The short legs gave it a peculiarly dumpy appearance and the bill seemed strangely out of character also, being a little larger than one would have expected for a bird of its size and grey in colour with a lightish-coloured patch on the end of the upper mandible. I did not at any time see it alight on the water and other observers reported on its aggressive behaviour. Nevertheless it allowed me to approach within a few feet to photograph it.

W. A. J. Cunningham.

(Two photographs of this bird appear elsewhere in this number. The Ivory Gull is the scavenger of the drift-ice fields, and in autumn it moves south no further than is necessary to keep pace with the border zone of the drift-ice belt. It is not, therefore, really surprising that it is so scarce in this country. The tameness and aggressiveness (even to much larger birds) noted by Mr Cunningham are characteristic of the species, as also is its extreme reluctance to settle on water. It has been suggested that this is because of the danger, in the high Arctic, of the water freezing to an ice crust on its feathers.—Ed.).

On 8th February 1962 an Ivory Gull appeared at Blacksness Pier, Scalloway. It was an adult bird in full white plumage (a rather opaque white such as one gets in the drake Eider), with black legs, dark eyes and a rather striking bill—slate-grey at the base and reddish-orange at the tip, this colour extending backwards a short way along the ridge of the bill.

In a fresh wind its flight was a quick but easy gliding motion, with very little of the flapping of the Kittiwakes occasionally flying beside it. It alighted on the water at intervals but never remained there long: it preferred sitting on the edge of the quay—a habit which any photographer would commend and which enabled me to take the photograph reproduced elsewhere in this number. The bird's most constant activity was a recurring patrol of a short length of the quay front above the water breaking against the pier. When fish offal was thrown to it on the quay, its behaviour in relation to the other gulls was bold and assertive, but it generally had to give way to the heavier and much larger Greater Black-backed Gulls.

At the time of writing (11th February) the Ivory Gull is still present and it has been joined by an adult Glaucous Gull.

J. Peterson.

MIGRATING TERNS (*Sterna* sp.)

Several times during the month of September 1961 I watched inland passage of terns at or near Lochgoin, a moorland reservoir on the Ayrshire-Renfrewshire border. The first occasion was on 2nd September, when a flock of c.50 birds passed over in the evening, heading southward. Later on, about dusk, more terns were heard at the loch, where they appeared to settle for the night. On 23rd September, as I was approaching the loch, I noted 14 terns flying about low over the water. They flocked together after a few minutes, climbed to several hundred feet and moved off south-westward. On 30th September, when making my way in to Lochgoin, 32 terns crossed above the road, flying westward. Two hours later, a flock of c.60 terns arrived at the loch from an easterly direction. They looked as if about to go down on the water and several birds did, in fact, alight momentarily. However, with only a slight pause, the flock went on, climbing and heading south-westward with a westward drift due to the strong south-east wind.

These migrating terns were, on the whole, rather silent; but *kit, kit* and *pirre* calls were heard, and they were mainly, perhaps wholly, "Comic" species.

It should be stressed that the foregoing were mere casual week-end observations—which argues that numbers of terns passing in this area at the time may have been quite large.

L. A. URQUHART.

BARN OWLS BREEDING IN SOUTH-EAST SUTHERLAND

Although there are several old records of Barn Owls being shot in East Sutherland, I cannot trace a confirmed breeding record and I was greatly pleased at finding a nest near Golspie last summer. On the evening of 14th July 1961 I was watching the Fulmars which nest on a sandstone sea cliff about fifty feet in height and which has a good deal of whin and scrubby birch growing on its ledges. My attention was attracted by a movement behind a whin bush about half way up the cliff, and on going nearer I had a nice view of an adult Barn Owl as it flew out.

I returned next evening with a rope and climbed down to the ledge where I was delighted to find three well-feathered young Barn Owls, which I ringed. Unfortunately, two of these have already been recovered. One was found injured on a croft in Brora on 17th September and the second was picked up dead near Loth on 19th December.

IAN D. PENNIE.

NOCTURNAL BEHAVIOUR OF BLUE TIT

As I was walking along a quiet street in Prestwick one winter evening after dark my attention was attracted by a noise coming from a nearby street lamp. The sound suggested that part of the lamp was being made to vibrate. I then saw that the unshaded bulb was being struck by a flying object. Had it been summer, I would have thought it to be a large moth, but on closer inspection I found it to be a Blue Tit. It was not being dazzled and colliding with the lighted bulb, but was deliberately flying at it and picking off minute insects—it was a fairly mild evening. The bird, which I was able to see was extremely scruffy and dirty, repeated this unusual performance several times, flying to and from the lamp and returning to the branch of a nearby tree. Each time it alighted it uttered quiet wheezy notes, unlike any I have heard from a Blue Tit before. The date was 15th November 1961, and the time 5 p.m.

R. MacAlpine Ramage.

(A recent note (*British Birds* 54:287) describes the regular use of sodium discharge street lamps for roosting purposes by Blue Tits and also, to a lesser degree, by several other species. There is, however, no mention of the birds using the lamps for any purpose other than roosting.—Ed.).

BLACKBIRD BUILDING MANY NESTS AND REARING BROOD CLOSE BESIDE ROBINS' NEST

In 1959 and 1960 a pair of Robins *Erithacus rubecula* nested successfully in my garage in the north-west suburbs of Glasgow. Perforce I have to leave the door open during the nesting period. This year—the third in succession—I found the Robins nesting late in April. They had chosen a site on top of the back wall of the garage and just under the roof, instead of their former site which was in the angle under the roof at the left end of the side wall. The brood fledged successfully towards the end of May.

Within a week of their going I noticed on several mornings a fair amount of grassy debris on the roof of my car, but it took me a few more days to realise that there were apparently three nests in adjacent shallow niches on top of the side wall and just below the sloping roof. The niches are formed by the roof timbers resting on the side wall of the garage. The nests were near the middle of the wall, and each one was placed in the left angle of its niche. While I was wondering what they meant, a hen Blackbird *Turdus merula* with a large bunch of nesting material in her beak flew past my head and proceeded to add to the third nest.

Over the next week this bird worked towards the right, building or partly building nine nests (they ranged in completeness from about a third to entirety)—only the last two being sited differently from the others. The first seven occupied the left angle of each niche to the end of the wall, the eighth was beyond these on the same ledge but in the angle under the roof (the counterpart of the 1959 and 1960 nests of the Robins at the other end of the wall), and the ninth nest was just round the corner on top of the doorpost.

One night we had friends to dinner, and I told them that the prevailing epidemic of psychiatric disorder had infected the avian community, and nothing would satisfy them but the sight of this phenomenon of nine nests built by one bird. So out we went about 11 p.m. and in the light of the garage bulb I counted the nests, "One, two, three, four, five, six, seven, eight," and "Goldilocks is on the last," announced my lady guest. And sure enough a pair of beady eyes surveyed us suspiciously from her ultimate creation. For so it proved. She laid four eggs and proceeded to incubate them, and no more nests were made.

But this was not the end of the story. A few days later, while the Blackbird was still sitting, I was working in the garden when a Robin started to forage for worms. With my help it soon collected a supply, and flew into the garage, to emerge without them. The inference was obvious, but in spite of a careful search I could find no nest, so that I hid behind a hamper to see what happened. When it returned the Robin immediately flew to what I had taken for the Blackbird's eighth attempt. I had not looked there because I had assumed, quite wrongly, that two such birds would not nest within nine inches of each other. In the event both broods were successfully reared, and on three occasions I had all four parent birds in the garage at the same time.

My own explanation of this curious behaviour by the hen Blackbird is that the ledge on which she built the first seven nests was too narrow and the angle of the roof above it was too acute as the nests grew; as soon as she became aware of the instability at each nest she deserted it and started on another. Her final nest was on a lower level with no sloping roof impeding her, and on an appreciably broader ledge.

The reason for both Robins and Blackbirds using the garage may be one of simple security, because during recent years we have frequently lost the contents of all our garden nests to hedge-walking cats and Magpies, both of which are common here.

A. STEWART HENDERSON.

(Who says ornithology is dull? Multiple nest-building has been fairly often recorded in such sites as the rafters of unfinished buildings, the rungs of a ladder hanging on a wall, or even under the three drainage holes of a large flower-pot inverted on the ground (see *antea* 1: 126 and *British Birds* 54: 247). The common feature of such sites is that each compartment in which a nest is started is exactly the same as the others. The explanation usually put forward is that the bird is confused and unable to decide which is the correct position. Eggs may be laid and partly incubated in several nests, but a successful outcome is perhaps the exception rather than the rule.—ED.).

METHOD OF PURSUIT BY A GREAT GREY SHRIKE

On 1st November 1961 I had a close view of an adult Great Grey Shrike in a hawthorn hedge near Lauriston, Kirkcudbrightshire. It took several long flights over neighbouring fields and then I lost sight of it. Shortly afterwards, in failing afternoon light, it re-appeared 40-50 feet up in the sky in determined pursuit of a small bird, apparently a Goldfinch. I watched the pursuit through glasses as it continued up and down the sky for nearly half a mile. The shrike repeatedly circled the small bird, diving towards it at a fairly steep angle. Several times the two birds seemed to be almost in contact, but the small bird succeeded in breaking away although gradually losing height. When last seen the shrike was still in close pursuit and had driven its potential prey almost to ground level. The manner ot attack was reminiscent of a Merlin.

A. D. WATSON.

TREE SPARROWS IN NORTH SUTHERLAND

In a small, isolated block of Sitka Spruce at Bighouse, Melvich, on 24th May 1961, Mrs Irene Waterston and I were rather puzzled by a flock of timid and restless little birds, which after careful stalking turned out to be Tree Sparrows. There were about fifteen in the flock, and a careful search showed no sign of nests. Tree Sparrows have never been recorded in North Sutherland before, although they formerly bred in the west and in the east as far up as Helmsdale. A few still breed in Dornoch. An arrival of a similarly sized party of Tree Sparrows on Fair Isle in May 1958 was described in *F.I.B.O. Bulletin* 4:47-48 and 82-84.

IAN D. PENNIE.

CURRENT NOTES

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Unless otherwise stated, January/March dates refer to 1962 and all others to 1961).

Breeding and Distribution

A **Little Grebe** was at Blackford Pond, Edinburgh, for several days from at least 8th November, and the observer comments that it is the first she has seen there (M.H.Y.).

An immature **Gannet** in the very black plumage of a bird of the year was seen standing in a field at Easter Ballat, between Drymen and Aberfoyle, on 24th September. This—the first record for West Stirlingshire—followed severe gales a week earlier (K.H.B.). Immature Gannets are seen every autumn in the vicinity of Tullibody Island, well up the Forth beyond Alloa, and the observer instances one on 1st October 1960 (T.P.).

A **Storm Petrel** was picked up still alive at Foyers, on Loch Ness, during a gale on 5th December but died the same night (M.Ru.).

In view of the scarcity of breeding records for all three species in Shetland, it is worth recording that single pairs of **Wigeon** were seen on lochs near Sandness on 26th May and near Whiteness the following day; also on the 26th on the same loch near Sandness were 7 drake and 5 duck **Tufted Duck**, and on another loch nearby there were 2 ducks and 1 drake **Pintail** (R.E.F.P.). The first recorded occurrences of **Gadwall** in Clackmannanshire are of two at Tullibody Island on 5th March 1960 and three on the following day (T.P.). A drake and duck **Velvet Scoter** were at Longannet, Fife, on 22nd

October and a single bird at Skinflats on the 23rd. This is the first time the observers have seen this species so far up the Forth and the latter record is the first for East Stirlingshire (G.D., J.P.). Three **Canada Geese** were at the west end of Loch Tummel, North Perthshire, for at least 3 weeks up to the time of writing on 12th November (W.B.P.).

There have been few published observations from Clackmannan and a number of relatively common species have still to be recorded from that county. The following wader records all provide first published occurrences for the county:

Ringed Plover. One at Tullibody Island on 13th April 1952 and 4 at the mouth of the Black Devon on 14th March 1960 seem to be the first definite records, although the species is referred to in both the Statistical Accounts as occurring at Alloa and it is described as "Resident?" in the *Geographical Distribution and Status of Birds in Scotland.*

Whimbrel. Common every autumn on Clackmannan shore of the Forth.

Black-tailed Godwit. One 12th September 1953, Haugh of Blackgrange, above Cambus; also subsequent records of 10 on Tullibody Island on 21st April 1957, and one in full breeding plumage on 29th April 1961 at the mouth of the Black Devon.

Bar-tailed Godwit. 7 on Alloa Inch on 19th September 1953; also 5 below the mouth of the Black Devon on 13th April 1961.

Green Sandpiper. This species has evidently already been recorded in Clackmannan (1936 *Scot. Nat.* 118) but it is worth recording that it occurs every autumn on Tullibody Island. One was also seen at Orchard Farm (between Alloa and Cambus) on 11th September 1960.

Wood Sandpiper. Single birds seen at Orchard Farm on 11th September and 9th October 1960.

Spotted Redshank. One in full breeding plumage at mouth of Black Devon on 15th April 1961.

Greenshank. Previous records have been published but it may be recorded here that it occurs commonly on the Forth every autumn.

Ruff. Recorded on several occasions between August and October 1960, the first date being 7th August when 3 were seen at Rhind; also seen in 1961—7 at Orchard Farm on 16th August.

(These records all supplied by T.P.).

Another county with unexpected gaps in its official list is Kinross. One such gap is the **Jack Snipe**, which is in fact a regular winter visitor to Loch Leven. The observer's first record there is of 2 on 13th October 1956, but on subsequent visits over half a dozen have been recorded (R.W.J.S.).

Green Sandpipers now seem to be wintering regularly in Berwickshire. On Bell's Burn, Manderston, near Duns, there were 4 on 22nd September and 1 or 2 regularly present between 2nd October and 20th December 1959, and in the same year there were also single birds at Duns Sewage Farm on 29th/31st January and 6th December. In 1961 two were present at Bell's Burn on several occasions between 8th and 18th November and one was still present on 31st December (S.J.C.). For earlier winter records from the same area, see 1951 *Scot. Nat.* 195 and *Edinburgh Bird Bull.* 8:68.

Some indication of the number of **Knots** in the upper reaches of the Forth was obtained on 26th November, when between 10,000 and 15,000 were seen flying across the river to Longannet at high tide to roost there behind the breakwater (J.B.). The same movement was observed and the numbers roughly checked on 11th December, when wave after wave came over with thousands of birds in each wave (J.H.).

There is no published record of the occurrence of the **Arctic Skua** in Clackmannan, but in fact it appears that these birds regularly find their way up to the head of the Forth estuary. One was seen at Tullibody Island on 1st October 1960 and there have been subsequent records of 4 on 9th and 2 on 11th August, and 2 on 9th September 1961 at Inch of Ferryton, between Kennetpans and Alloa (T.P.). A summer record of an Arctic Skua in Luce Bay, Wigtownshire, on 18th June is an unusual occurrence for the Solway area (E.L.R.). Inland records of **Pomarine Skuas** are very scarce, but an immature bird with a broken wing was picked up alive at Dyke Farm, near Moffat, on 30th October. It died two days later (E.D.). This bird may have been blown inland from the Solway, but it seems more likely that it was making the overland crossing from Forth to Solway.

There is no published record of the **Greater Black-backed Gull** in Clackmannan, but in fact it is found commonly all along the shore of the Forth, and in winter flocks of between 6 and 24 may always be seen at certain favoured places in the Alloa area (T.P.) and many are seen coming in from this direction in the evening to Longannet, where up to 250 of these gulls roost in the winter (J.H.). Twenty years ago a Greater Black-backed Gull was caught on the hill near Dollar. It had gorged itself so thoroughly on caterpillars of the Antler Moth *Charaens graminis,* of which there was then a plague, that it was unable to fly (G.D.).

There is further news of the spread of the **Collared Doves** from their original colony at Covesea Farm, Morayshire (see *antea* 1:480). Breeding was first proved in the grounds of

Gordonstoun estate, three-quarters of a mile from Covesea, in 1960 and 24 birds were counted there in November 1961. The species has also bred in Duffus House grounds since 1960 and 23 birds were counted there in November 1961. This is about 1½ miles from Covesea. One pair has been breeding in the village of Duffus adjoining the estate since 1959 (R.R.).

The **Barn Owl** is a species which seems to be declining seriously in Scotland. It therefore seems worth recording the presence of a single bird at Longannet on 25th February 1961 and on several occasions from December until the time of writing (13th February) (J.H.). All information as to the status of this species will be very welcome.

Further evidence of the spread of the **Green Woodpecker** is provided by the following records:

Kirkcudbright: The species has been noted in the area at least since 1957 and has nested, probably more widely than has been reported. In 1961 birds have perhaps been rather more in evidence than usual. During October and November there were 2 or 3 in a wood near Loch Stroan; one was seen near Corsock on 25th October and another at Todstone, near Dalry, in early January 1962 (A.D.W.).

Selkirk: On 12th November one was seen in a wood at the mouth of the Megget at St Mary's Loch (J.B.).

Midlothian: Birds have evidently been present in Mid Calder Wood, between Mid and East Calder, since 1955, as odd birds have been seen and heard there from time to time. One was seen being fed by another in late summer 1956 but no nest has ever been found (H.H., C.F.). At least one has been seen and heard from time to time in woods near Balerno below Dalmahoy Hill (A.G.M.).

West Lothian: Two were seen near Livingstone on 20th August (W.K.), and a pair regularly since May on the Dalmeny Estate near Hound Point (T.C.S.).

East Stirling: On 25th December one was seen and heard in a small wood between Denny and Torwood Castle—a particularly valuable record as the observer has visited this wood on many occasions over the past three years and never recorded the bird before (R.A.E.). Harvie-Brown and Cordeaux heard a Green Woodpecker in the same area many years ago but most reprehensibly omitted to note the date ("Birds of Scotland" p. 254)! During the summer of 1958 one was seen and heard at Camelon (R.A.E.).

West Stirling: Mr McLean, the forester at Lennox Castle, reports that a pair of Green Woodpeckers bred in the castle grounds in 1960 and 1961, and possibly also in 1959. In 1961 the nest was 14 feet up in a beech tree (T.W.).

Great Spotted Woodpeckers, of which the first recorded occurrence for Kinross was given *antea* 1:497, are probably quite common in the county and have been seen twice at Loch Leven (R.W.J.S.).

In the *Geographical Distribution and Status of Birds in Scotland* the status of the **Blue Tit** in the Outer Hebrides is described as "Resident." The same authors later observed (*Birds of Scotland* 1:128) that there was no satisfactory breeding record for this area, and we can find no evidence that the species has ever even occurred there, until as least

2 and probably 3, or even more, were seen in Stornoway Woods on 7th November (S.L.B.L.). On 18th November one was seen in the same place in company with Goldcrests (M.F.M.M.).

On 30th May 1961, while climbing Foinaven from Strath Dionard, a male **Pied Flycatcher** was seen amongst sparse rowans at the edge of a burn. It flew from one tree to another down the burn and across the hillside to Loch Dionard. There are no previous records of this species in North Sutherland (I.D.P., G.W., M.I.W.).

With reference to the note on the status of the **Crossbill** in Wester Ross (*antea* 1:457) it is recorded that in the east of the county Crossbills are common in the Forestry Commission plantations at Tore, on the Black Isle (M.K.M-D.).

The first record of **Tree Sparrows** in North Sutherland appears elsewhere in this number, and a most interesting companion record is of 4 seen at Durness on 22nd August (R.H.D.). The species also seems to be very scarce in the extreme southwest, and it is interesting to hear of flocks of 10 on 8th October at Moss of Cree, and 50 on 17th December at Ravenstone, near Whithorn, both in Wigtownshire (A.F.A.). Even in the Tweed area there is little detailed evidence as to the Tree Sparrow's distribution, and it seems worth recording that 12 were seen by the Tweed just below Innerleithen, Peeblesshire, on 18th November, and on 17th December there were about 40 at Ettrickbridge in Selkirkshire (J.B.).

Spring 1961 and earlier records

A **Grey Lag Goose** at Sandness, Shetland (where the species has never bred), on 25th/26th May 1961 is an exceptionally late date for spring migration (R.E.F.P.). Unusual numbers of **Rough-legged Buzzards** came into this country in the autumn of 1960, and an additional record is of a female found dead at the south end of the Sma' Glen, Perthshire, on 6th November. The skin was preserved and recently shown at a meeting of the S.O.C. Edinburgh Branch. The bird weighed 2 lb 8 oz, as compared with 1 lb 10 oz recorded for an example of the common **Buzzard** (D.C.A.). On 12th May 1961 a **Whimbrel** was heard and seen at close quarters by the main road between Selkirk and Ashkirk (B.C., P.B.): there seems to be only one previous record for Selkirkshire (*Edinburgh Bird Bull.* 5:13).

24th May (1961) seems an early date for a flock of 45 **Ravens** at a ploughed field by the road at Clickhimin, Lerwick (R.E.F.P.).

Autumn and winter visitors, 1961/62

A **Great Northern Diver** at Kendoon Loch, near Dalry, Kirkcudbrightshire, on 10th November was still in almost complete summer plumage (P.G.B.). On 17th December a **Red-necked Grebe** was seen off Hound Point, West Lothian (T.C.S.).

Gadwall have again wintered in Edinburgh: a drake and 2 ducks have been present from at least 12th November (when there may also have been two other birds) until the time of writing (2nd March). They are usually to be found at Dunsappie Loch but in frosty or windy weather they move down to the shelter of St Margaret's Loch or the Figgate Pond (D.R.A., D.G.A.). Up to 3 Gadwall have been seen intermittently on Loch Ken during the winter (A.D.W.).

Some indication of the enormous numbers of **Wigeon** wintering in the south-west of Scotland is given by the following counts, all in Wigtownshire: over 4,000 in Wigtown Bay on 10th October and over 2,000 there on 6th and 20th November; over 2,300 at the south end of Loch Ryan on 14th November; at least 3,000 at the White Loch, Castle Kennedy, on 2nd December, and 6,000 there on 11th December (A.F.A.).

A flock of 140 **Pintail** in Montrose Basin on 8th November (H.B.) may be unremarkable, but the locality is not mentioned as a wintering area in the *Birds of Scotland*. The Beauly Firth below Lentran is mentioned as a regular winter haunt, but 136 at Inverness on 4th November (R.H.D.) may represent a different wintering population. A drake Pintail at Duddingston Loch on 14th November is an unusual visitor to the centre of Edinburgh (D.R.A.).

Shoveler are not common on the East Lothian coast, and a drake at Tyninghame on 17th December (R.W.J.S.) and a duck at Aberlady on 6th January (H.F., H.G.F., I.F.) are worthy of note.

On 26th January between 9,000 and 10,000 **Scaup** were counted off Seafield, Leith, and this probably represented the total population in the area at the time (D.G.A.). Inland records of this species (except at the Edinburgh town lochs where odd birds appear regularly at Lochend and Duddingston in particular) are as follows: 2 drakes at Loch o' the Lowes, Ayrshire, on 18th September (J.A.B.); one duck at Hule Moss, Berwickshire, on 8th October (S.J.C., M.J.H.); one immature at Lochgoin on 8th October and what was probably the same bird at High Dam from 28th October to 25th November, and a duck at Barr Loch on 12th November—these all in Renfrewshire (L.A.U.); and a first winter drake at Kendoon Loch, near Carsphairn, Kirkcudbrightshire, on 21st December (A.D.W.).

The hard weather in December upset the orderly routine of fresh-water diving ducks such as **Pochard**. Two drakes were recorded at Tyninghame, East Lothian, on 10th December (R.W.J.S.), and large numbers made their appearance on the sea off Seafield, Leith, during the day. In fact it appears that the large numbers of Pochard that regularly winter at Duddingston Loch, where they can seldom be seen to do any active feeding, habitually flight down to the sea at night (T.C.S.). The quite exceptional number of 3,170 Pochard was recorded in this area on 23rd January. It is tempting to connect this with the prolonged severe frost both in this country and on the Continent, but it appears that at least the main part of the increase took place in the second and third weeks of January after the hard spell had ended. Numbers had decreased to 1,100 by 23rd February (D.G.A.).

In mid-December numbers of **Goldeneye** on the Tay Estuary were far below normal (H.B.), but on the Forth there have been the usual large numbers at Seafield and a count of 1,250 was obtained on 7th February (D.G.A.). Two were on Dunsappie Loch, Edinburgh, on 12th and 20th November—a locality where the species has been very rarely recorded (D.R.A., J.B., T.R.F.).

Inland records of **Long-tailed Ducks** come from Portmore Loch, Peebles-shire, where one was present on 11th and 19th November (D.G.A., R.W.J.S.), and Castle Loch, Mochrum, Wigtownshire, where an immature was seen on 14th December (A.F.A.). Another unusual inland record is of a duck **Common Scoter** on Loch Ken, Kirkcudbrightshire, on 14th October (L.A.U.).

On 2nd January, after weeks of snow and severe frost, a duck **Goosander** appeared amongst the Mallard on a small open pool in the ice at St Margaret's Loch, Edinburgh. It came up to within 3 feet of the observer to take the bread thrown to the ducks (D.E.B.). It was still there on the 5th but had gone by the 12th (D.G.A.). What may well have been the same bird was seen at Duddingston on the 18th (D.R.A.) and at Dunsappie on 2nd March (D.G.A.).

There have been several records of **Smew**—all from the southern half of Scotland. A drake was at Kilconquhar Loch, Fife, on 19th November (T.G., J.Mi., T.Sd., P.W.); there was a duck at Barr Loch, Renfrewshire, on 13th December (L.A.U.). Smew are now regular winter-visitors to the Loch Ken area of Kirkcudbrightshire, but a party of 4 (one drake and 3 red-heads) on the River Dee on 1st January was the largest number the observer has seen together since 1956; in addition single birds or two together have been seen frequently in late December and throughout January (A.D.W.).

Shelduck have been recorded inland at Hamilton Low Parks, where an immature was seen on 27th August (L.A.U.), and at Hule Moss, Berwickshire, where two (only the second occurrence for the area) flew past heading NNW on 8th October (S.J.C., M.J.H.).

Six **Grey Lag Geese** flying south at Easthaven, Angus, on 31st October are mentioned by the observer because there are very few records of coasting geese in this area (H.B.). Grey Lag in the Loch Ken/Castle Douglas area of Kirkcudbrightshire increased from 400-500 to close on 1,000 in the cold spell in December (A.D.W.), and large numbers are also recorded from Wigtownshire, where 5,000 were counted roosting at the White Loch, Castle Kennedy, on 14th November and over 1,000 on 2nd December (A.F.A.) and again on 2nd January (A.D.W.).

On 9th December three geese (species unknown) came down in foggy weather to alight on the ice at Duddingston Loch beside the tame Grey Lag (D.R.A.).

In November the flock of **Greenland White-fronted Geese** at Loch Ken amounted to at least 500 birds in two main groups. For the second successive year there have been very few first year birds: out of 150 examined on 26th December only one was first year, although a few family parties have been seen in some sections of the flock (A.D.W.).

The Kirkcudbrightshire **Bean Geese** were first seen by the observer on 19th December, when there were 10, but there may have been a few earlier than this (A.D.W.). On 28th January there were about 125 in the area (E.L.R.) and these numbers had probably been present since 26th December, when an incomplete count suggested a total of over 100 (A.D.W.). This shows a welcome improvement from the 1960/61 winter when the maximum count was only 68.

Unusually large numbers of **Pink-footed Geese** are reported from Newburgh, Fife, and probably over 8,000 were seen on the observer's farm on two days between Christmas and the New Year (T.S.). Pink-feet do not normally occur amongst the inland goose population in the Solway area, but one has been seen regularly with the Greenland White-Fronts at Loch Ken, and in the same area a few Pink-feet appeared amongst the Grey Lag in December, including at least one small flock which came from the north over Dalry on 29th December (A.D.W.). On 16th December there had been a steady movement of Pink-feet through to the south-west at Gladhouse Reservoir, Midlothian; this was during the only mild spell in a very cold month (D.G.A.).

We have received only one further record of **Brent Geese** so far this winter (see *antea* 1:501)—a single bird at Hunterston, Ayrshire, on 12th November (G.F.). There have been several records of **Barnacle Geese** in odd places: up to 5 have been seen at Newburgh, Fife, in January and there are reports of a flock of 30 in the area; similar numbers are said to have wintered in the same area in 1959/60 and 1960/61, and there are intriguing rumours of a flock of 20 having summered there in 1961 (T.S.). On 2nd January 5 Barnacle Geese were seen flying south at Monreith Bay, Wigtownshire (A.F.A.), and 3 flying westwards over Hamilton Low Parks on 20th January were independently reported by two observers (J.C., D.R.W.). A single Barnacle Goose has been keeping company with the Pink-feet in the Libberton area in Lanarkshire where it has been seen by many observers during January. The Barnacle Geese roosting at Gladhouse Reservoir, Midlothian, (*antea* 1:501) were last seen on 25th November, when there were 3 (D.G.A.).

Whooper Swans are widely distributed over Scotland in the winter and the following records have been selected for publication because of the large numbers involved:

Speyside, from Carrbridge to Corrieyairack—150 (23 cygnets) counted on 1st November (R.H.D.).

Torhousekie Marsh, near Wigtown—33 (13 cygnets) feeding in a stubble field, 18th November (A.F.A.).

Loch Leven—96 (36 cygnets) counted on 19th November (T.W.).

Dalreoch, near Auchterarder, Perthshire—over 60 on 17th December (T.S.).

Carstairs, Lanarkshire—92 (13 cygnets) on 16th January (G.W., M.I.W., D.G.A.).

Bewick's Swans are now much scarcer over the whole of Scotland and we have only received the following records:

Dalreoch, near Auchterarder, Perthshire—one with Whoopers on 17th December (T.S.).

Machrihanish, North Argyll—one of a pair, flighting in to a pond with Grey Lag Geese, was inadvertently shot on 29th December. The second bird flew around several times calling to its late companion and then flew off and was not seen in the area again. The shot bird came into the hands of the observer. It weighed 10 lb 12 ozs. On dissection it proved to be a female and the alimentary tract was full of fresh grass blades. The skin was subsequently exhibited at a meetting of the S.O.C. Edinburgh Branch, as also was the peculiar looped wishbone which is characteristic of this species and of the Whooper Swan, but not of the Mute Swan, nor apparently of the Trumpeter Swan of North Amerca (see Voous, "Atlas of European Birds" p. 49) although this is still officially recognised as conspecific with the Whooper Swan ("Ibis" 98: 159) (D.C.A.).

Carnwath, Lanarkshire—four on a small pool by the River Medwin on 14th January (M.F.M.M., C.E.P.); when flushed, these flew off towards Carstairs, where on 4th February a single Bewick's Swan was seen amongst the Whoopers (C.E.P., J.M.S.A.).

Coldstream, Berwickshire—5 on the Tweed about 5 miles above the town on 18th February (T.C.S.).

Two **Buzzards** were seen in the Moorfoots above Walkerburn on 22nd October (J.B.), and a single bird was present at Bow of Fife, near Cupar, from 8th to 12th November (G.S.R., M.M.S.).

There have been a number of records of **Hen Harriers**:

Speyside—single males seen at Boat of Garten on 2nd, and at Aviemore on 5th November (R.H.D.).

Aberdeenshire—female/immature at Garlogie, 23rd December (D.G.A.); harriers are said to winter fairly commonly in the county (D.J.).

Midlothian—female/immature near Gladhouse Reservoir on 3rd and

24th December and at Rosebery on 4th February (R.W.J.S.).

Berwickshire—single birds at Hule Moss on 16th July, 13th August and 17th September (S.J.C., M.J.H., D.G.L.).

Kirkcudbrightshire—two (a male and a female/immature) have frequented lowland country near Loch Ken this winter (A.D.W.).

Wigtownshire—male near Wigtown, 27th November (A.F.A.).

A **Merlin** has been seen on six occasions since October at Aberlady Bay and is evidently wintering there: normally the species is only an occasional winter visitor to the bay (W.K.B.).

A **Water Rail** (a rare bird in south-east Sutherland) has wintered on the Dornoch Burn; it was first seen on 10th November and was still present on 28th January (D.M.). In Wigtownshire the species is evidently a common winter visitor, and single birds were recorded at White Loch, Castle Kennedy, on 2nd December, and White Loch, Monreith, on 24th January (A.F.A.), and also near Glenluce on 23rd and close to Loch Ryan on 24th December (J.Mu.).

In our last number (*antea* 1:502) we published some notes on concentrations of **Coot** recorded this winter, including a count of over 500 at Forfar Loch on 16th October. 445 were still there on 14th November (H.B.). Lochmaben seems to be one of the regular wintering haunts and 250 were counted there on 4th October (A.F.A.). The following concentrations recorded in Wigtownshire may also prove to be more or less normal: 150 at White Loch, Castle Kennedy, on 11th December, and 250 there on 8th January and 6th February; 140 at Soulseat Loch, near Stranraer, on 10th December, 200 there on 8th January and 120 on 6th February; 100 at Loch Magillie in the same area on 6th February (A.F.A.). On the other hand a dense raft of 450-500 Coot on Loch Eye, near Tain, on 11th November is most unusual for Easter Ross, although 200 had been recorded at the same loch on 5th November 1955 (D.M.).

Some impressive figures from Kirkcudbrightshire and Wigtownshire give an idea of the size of the wintering population of **Lapwing** in south-west Scotland. Over 2,500 were roosting on the Lochar estuary by Ruthwell on 4th October. In the Wigtown area there were over 1,000 on Moss of Cree on 8th October, and in the Baldoon Airfield/Orchardton Bay area there were counts of 1,000 on 6th November and 1,500 or over on 10th December and 2nd February (A.F.A.). Three Lapwing turned up on the Flannans on 18th September (S.L.B.L.).

At Gladhouse Reservoir, Midlothian, there was one **Grey Plover** on 22nd October; two on the 29th; and one on 5th November (R.W.J.S., D.G.A.).

Baldoon Old Airfield, near Wigtown, must hold one of the largest wintering flocks of **Golden Plover** in the whole of Scotland. 3,500 were present there on 26th October, and 4,000 or more stayed in the area from early November to the end of December. On 10th December these numbers were increased to 8,000, when a big passage movement north to south down Wigtown Bay brought a further 4,000 Golden Plover temporarily into the area. This movement coincided with a thaw following a spell of hard frost. By 2nd February numbers had fallen to about 1,000 (A.F.A.). In the Stranraer area Golden Plover have been exceptionally numerous this winter (J.Mu.).

On 2nd January over 30 **Woodcock** were flushed from rough grass at the cliff tops near St Abbs Head, Berwickshire. Inland the countryside was covered with snow and the ground was frozen hard, but on the cliffs the ground was free of snow and quite soft in places. This presumably accounts for the appearance of these birds in such an unlikely place (R.M.).

A single **Curlew** was feeding with Redshank (see below) on the Broughton playing fields, in the Wardie district of Edinburgh, on 9th January (B.R.T.).

In addition to the records already published (*antea* 1:502) **Black-tailed Godwits** have been reported from the following places:

Steinish, Lewis—one on 20th November (M.F.M.M.) and 4th December (W.A.J.C.).

Longannet, Fife—there is a further late record of 3 on 4th November (G.D., J.P.).

Skinflats, Stirling—there are additional records of 15 on 21st August; 19 on the 22nd; and 1 on the 28th (R.A.E.).

A winter record of a **Green Sandpiper** comes from Greenlaw, Castle Douglas, on 18th February (W.A.). There are further autumn records of a bird of this species at Cameron Reservoir, Fife, on 7th August (R.S.W.), and of a **Wood Sandpiper** at Spiggie, Shetland, on 7th September (R.H.D.) (see *antea* 1:503).

On 9th January, shortly after the end of a prolonged spell of very hard frost, 63 **Redshank** were on Lomond Park and 55 on Broughton playing fields, both in the Wardie district of Edinburgh (B.R.T.). Although only ¼ mile from the sea, this is in the middle of a built-up area. It would be interesting to know whether Redshanks regularly visit these fields in such numbers or whether they only do so when their routine is upset by hard weather. Further along the coast at Musselburgh Redshank regularly visit the Loretto playing fields, especially at high tide, but these lie immediately adjacent to the sea. Between 12th and 25th January up to 3 Redshank were regularly seen at St Margaret's Loch, where the water level had been temporarily allowed to drop (D.G.A.).

Autumn records of **Spotted Redshank** additional to those already published (*antea* 1:503) are as follows:

Skinflats, Stirling—one, 21st August (R.A.E.).
Caerlaverock, Dumfries—one, 14th August (E.L.R.).

Late or wintering **Greenshank** have been recorded from the following localities:

West Lewis—one, 31st October (S.L.B.L.).

Aberlady, East Lothian—one has remained in the bay until at least the end of January (W.K.B.).

St Andrews, Fife—one at Lawmill Pond (which had been recently drained) from 18th to 23rd November (M.H.E.C.); one on the coast on 16th December (P.G.B.).

Loch Leven, Kinross—one, 3rd November (H.B.).

Ayrshire—one at Barassie, 17th December (L.A.U.), and one inland at Loch o' the Lowes, New Cumnock, on 1st and 2nd January during very hard weather; it was feeding at the inflow of warmer water from the pits nearby (J.A.B.).

The following autumn records of **Ruff** are additional to those already published (*antea* 1:505).

Spiggie, Shetland—four on 7th September (R.H.D.).
West Lewis—one on 15th September (S.L.B.L.).
Skinflats, Stirling—3 on 28th August and 7 on 6th September (R.A.E.).
Loch o' the Lowes, Ayrshire—4 on 30th August (J.A.B.).

The following records suggest that there was a minor "wreck" of **Phalaropes** along the west and north coasts in the autumn of 1961:

Spiggie, Shetland—a Grey Phalarope had been found dead about 4th September (per R.H.D.).

West Lewis—7 on 17th, 2 on 20th and 5 on 22nd September, all seen on the sea and all thought to be Grey Phalaropes (S.L.B.L.).

The Minch—one phalarope (thought to be Grey) flying south on 12th October (R.H.D.).

Sanquhar, Dumfries—one Grey Phalarope on flooded grassland from 25th to 29th October, following heavy rain and severe SW gales (J.L., E.L.R.).

Closeburn, Dumfies—later on 26th October a second Grey Phalarope (visibly a different bird) was seen 12 miles away from the preceding record, also on flooded grassland (E.L.R.).

Islay—on 25th October a phalarope was feeding close in to the shore in Port Ellen bay; a few days later an injured phalarope was picked up on the other side of the island. In neither case was it possible to identify the species (H.K.).

Off the west coast of Lewis there was a marked passage of **Pomarine Skuas** (a few **Great Skuas** with them) on 16th and 17th October. Sample counts were made of 9 passing in an hour and 10 in 40 minutes. This was associated with a passage of Kittiwakes (S.L.B.L.). A late **Arctic Skua** was chasing gulls in mid-Forth at Longannet, Fife, on 4th November (G.D., J.P.), and 2 were seen at Inverness on the same date (R.H.D.).

A **Scandinavian Lesser Black-backed Gull** *L. f. fuscus* was sitting on the ice at Harper Rig Reservoir, Midlothian, with other gulls on 7th January (T.C.S.). Single **Glaucous Gulls** have appeared in Berwickshire at Hule Moss on 24th September (S.J.C., M.J.H., D.G.L.), and at Eyemouth (a first winter bird) on 28th December and 1st January (R.M.).

A **Common Tern** appeared inland at Hule Moss, Berwickshire, on 9th September, and an unidentified tern was recorded at the same place on the 17th (S.J.C., M.J.H., D.G.L.). A **Sandwich Tern** at Cult Ness on 3rd November is an unusually late record (G.D., J.P.).

On 21st January over 20 **Long-eared Owls** were counted in a spinney at the east end of Aberlady Bay, East Lothian—the largest number so far recorded there (W.K.B.).

Kingfishers have been seen singly at Bell's Burn, Manderston, Berwickshire, on 27th December (S.J.C.), and at Baldoon Old Airfield, Wigtown, on 26th October (A.F.A.).

The prolonged hard frost in the second half of December produced several interesting observations of **Skylark** movement. One was seen dodging through the traffic in Princes Street, Edinburgh, on 29th December (H.F.). On 1st January about 1,500 Skylarks passed north-westwards over Monreith, Wigtownshire, following the east side of Luce Bay (A.F.A.). On 7th January a pronounced south-westward movement of Skylarks was observed over the Cramond/South Queensferry shore and a few were heard over Edinburgh the following day (T.C.S.).

Exceptional numbers of **Swallows** have been reported lingering into November this winter:

1st—One, Kingoodie, Perth (see Vol. 1: 506).
Four, Monreith, Wigtown (A.F.A.).
2nd—Two flying south, Cult Ness, Fife (G.D., J.P.).
4th—One, Portencross, Ayr (see Vol. 1: 506).
6th—One at Invergowrie, Perth, till this date (H.B.).
8th—Single birds in Edinburgh at Slateford (T.H.S.). and at Morningside (W.B.).
9th—One at Dornoch (D.M.).
About this time at least 2 at Selkirk ("Southern Reporter", 16th November).
12th—One at Elie, Fife (T.Sd.).
13th/15th—One at Lundin Links, Fife (R.S.W.).
16th/18th—At Pittenweem, Fife, two on 16th, one on 17th and three on 18th (T.Sd.).

On 18th September two **Swallows** and two **House Martins** were seen on the Flannan Islands (S.L.B.L.). The only late record of House Martins is of a single bird at Portencross, Ayr, on 12th November (G.F.).

A flock of 109 **Carrion Crows** on the foreshore at Cramond, Midlothian, on 15th November included one apparently pure **Hooded Crow** and several hybrids (T.C.S.). There was a Hooded Crow at Dowlaw Farm, Coldingham, Berwickshire, on 3rd December (S.J.C.).

On 10th and again on 16th December 12,000 **Rooks** and **Jackdaws** were counted gathering in fields south of Wigtown preparatory to flying off north-east across Wigtown Bay to roost somewhere in the Creetown area (A.F.A.).

Jays were noted as being more widespread between October and December in the New Galloway/Dalry area than they have been for several years (A.D.W.).

On 1st January about 750 **Fieldfares** were observed migrating north-westward up the east side of Luce Bay, Wigtownshire, during a spell of hard frost with 2 inches of snow lying (A.F.A.).

A late **Ring Ouzel** was feeding near a flock of Fieldfare at Glencorse Reservoir, Midlothian, on 10th November (M.H.Y.). A flock of 10 Ring Ouzels, flushed in the Moorfoot Hills on 8th October, flew around giving an unfamiliar call-note—*"Prrrt"* —which seemed to serve as a party collection call. The same call had been heard in the same area in thick mist at 4 p.m. on the previous day and probably came from a migrating party of these birds passing over to the south (W.B.).

Stonechats are known to winter commonly in the Solway area, but it seems worth mentioning that on 10th October 10 pairs were seen along a five mile stretch of the coastal road between Monreith and Alticry, Wigtownshire (A.F.A.). One was seen near Carstairs Junction, Lanarkshire, on 16th January (M.I.W.).

There has been a remarkable number of records of **Blackcaps** this winter:

Stornoway, Lewis—female, 7th November (S.L.B.L.).

Corpach, Fort William, S. Inverness—male at feeding box almost every day from Christmas to time of writing (16th January) (S.B.).

Tore, E. Ross—male killed by cat, 13th November (M.K.M-D.).

Inverness—female eating shortbread put out for other birds at kitchen window-sill, 15th December (E.B.M.).

Gartocharn, Dunbarton—male in woodland fringe on west side of Duncryne Hill on 13th November; a male had been seen here on 29th August and a female on 7th September (T.W.).

Roseneath, Dunbarton—male, 17th December (M.Ro.).

Redhall, Slateford, Edinburgh—male, 15th November (J.H.S.).

Colinton Dell, Edinburgh—male caught when batfowling, 26th November—possibly the same individual as in the preceding record; a male and female were caught in this area last winter (see Vol. 1: 434) but this year's bird was unringed (I.V.B-P.).

Edmonstone, Edinburgh—male caught in mistnet (the first the observers had seen of it), 24th December (D.E.B., A.T.M.).

Musselburgh, Midlothian—male at bird table, 28th December to 4th January and again 20th January and after (A.J.H.).

Ayr—female, 4th February (I.B.).

Dalry, Kirkcudbrightshire—male, 24th October—the third successive autumn that Blackcaps have visited the observer's garden, where an apple tree seems to be the main attraction. This year there was no fruit and the bird did not stay (J.W.)

By contrast there have been only two records of late **Chiffchaffs**: One was seen at Dornoch, Sutherland, on 10th and 17th November, feeding amongst withered weeds beside a burn (D.M.); and one was seen at Buchlyvie, E. Stirling, on 11th November (D.E.B., M.C., A.T.M., M.F.M.M.). In both cases the dark-coloured legs were noted.

A **Goldcrest**, very much out of its element, was found at Smoo Lodge, Durness, on 27th August. There are no woods at all in this area. The bird's arrival coincided with a southerly gale which lasted several days (R.J.B.).

Five **Yellow Wagtails** at Loch o' the Lowes, New Cumnock, Ayrshire, on 30th August, are the first the observer has seen in the district (J.A.B.). One would like to know more about the distribution of this species in the west of Scotland.

Great Grey Shrikes have been much scarcer this winter than last. Single birds were seen at Aviemore and Nethybridge in Speyside in November/early December (R.H.D.); at Glassel, Aberdeenshire, on 25th/26th December (D.G.A.); and at Lauriston, Kirkcudbrightshire, on 1st November (A.D.W.).

Goldfinches have been unusually abundant in the south of England this year (*British Birds* 54:442), and one gets the impression that in Scotland the species is doing very well. This is probably due to a succession of good breeding seasons and mild winters, but the following records suggest that there has also been some immigration from abroad:

St Kilda—two, 9th November (P.J.F.). The first record for the island.

Stornoway, Lewis—3 on 18th November, later seen with 2 other birds which may have been the same species (M.F.M.M.).

Borve, Harris—6 on 20th November. The only previous record which the observer has for the Outer Hebrides is of a single bird at Stornoway on 22nd January and 9th February 1958 (W.A.J.C.).

Isle Ornsay, Skye—one on 2nd January had probably been present since the end of November (S.S.).

Dornoch, Sutherland—1 to 3 birds seen on various dates between 24th December and 27th January (D.M.).

Isle of May—one on 4th November, as recorded in the Report elsewhere in this number.

In our previous number we commented on exceptional numbers of **Siskins** and recorded heavy immigration starting on 12th October (*antea* 1:508). Further evidence of abundance is provided by the following records, from which it also appears that the immigration from abroad started earlier than had been indicated:

Orkney—first seen 29th September, when 25-30 at Binscarth Plantation and at least 200 in St Ola; on 1st October there were 30-40 in the natural wood of Berriedale on Hoy; on 4th October 20 were feeding on meadow sweet at Stennady, Finstown; on 8th October parties of Siskins were to be found all over Mainland, including one flock of over 200. On 11th October the observer went out for four days to the uninhabited island of Auskerry. The rush of migrants had ended, but there were many dead Siskins and a small number of live ones desperately striving to find food. A few stragglers have been seen in Orkney throughout the first half of November (E.B.).

St Kilda—single birds seen twice, 12th November (P.J.F.). These are first records for the island.

Steinish, Stornoway—male in stubble field, 17th November; 3 feeding on ragwort seeds the following day (M.F.M.M.).

Speyside—very numerous, the maximum count being of over 350 at Inshriach on 1st November (R.H.D.).

Gregness, Kincardineshire—big arrival of small passerines on 5th October, including many Siskins (A.S.). 4 seen there the following day (V.C.W-E.).

Aberdeenshire—4 at Mains of Slains Farm on 7th October (E.S.). 6 above the Bridge of Don on 8th October were the first recorded by the observer within the City of Aberdeen; on the same day two flocks totalling over 100 birds were feeding on old flower heads of meadow sweet and other plants at Murcar. In Deeside, mixed flocks totalling over 100 Siskins and Redpolls were seen near Dinnet on 22nd October, and another mixed flock of 100-150 was seen in Glen Muick, near Ballater, on 12th November. The observer has never seen so many Siskins during the 15 years he has lived in this area, and only once in the past 10 years has he seen as many as 50 in a flock (V.C.W-E.).

Lawers, Perthshire—150 feeding on seed heads of bushes sticking up through thick snow, 25th November (P.W.S.).

Drymen, Stirling—flock of at least 100, 30th October (W.G.M.H.).

Isle of May—the first influx was of 40 birds on 19th September (see Report elsewhere in this number).

Wigtownshire—small flocks have been seen regularly in various places from October onwards, with a maximum of 70 near Wigtown on 25th November (A.F.A.).

The first two **Twite** of the winter were recorded at Cult Ness, Fife, on 2nd November (G.D., J.P.).

Redpolls also seem to have been numerous this autumn—*e.g.* 200 at Boat of Garten, Speyside, on 24th November (R.H.D.)—but there is nothing to suggest any large scale immigrations from the continent. The Isle of May Report published elsewhere in this number records 3 Redpolls during the autumn season, but these were all identified as Lessers. A Redpoll seen in Stornoway on 7th December may have belonged to one of the other races of *Carduelis flammea* (W.A.J.C.).

Northern Bullfinches *P. p. pyrrhula* have been trapped at the Scottish Observatories this autumn, and there have been several reports from the mainland of birds thought to belong to this race. 2 cocks and 3 hens near Stormont Loch, Angus, on 14th November seemed to show the clear blue grey backs and bright rosy red breasts of the Northern race (H.B.), and 6 cocks near Boat of Garten, Speyside, on 15th January were also thought to be this race (R.H.D.). Some of the large flock at Gladhouse Reservoir, Midlothian, (*antea* 1:508) were thought by D.G.A. and R.W.J.S. to be of the Northern race, but 16 (including only 3 cocks) were caught in mistnets on 18th November and all were within the measurements range of British birds. In the net the cocks looked quite bright but they became duller as one looked more closely (D.E.B., M.C., A.T.M.). It is just possible that only British birds were caught because the Northern birds are said to keep more to the tree-tops and so may have avoided capture, but it is clear that sight identifications of this race require very great caution. Light conditions can be most misleading, especially on days when there is no sun to throw heavy shadows.

There have been the following records of substantial flocks of **Snow Buntings**:

Cairngorms—80 to 100 in the Cairngorm/Ben Macdhui area in December (R.H.D.).

Buddon Burn, Monifieth, Angus—two flocks each of about 200 birds arrived from the east on 17th November and turned to the north or north-west (H.B.).

Longannet, Fife—200 arrived on 11th February (J.H.).

Swanston, Midlothian—150 on 11th January (H.F.).

Midlothian/Peebles—75 at Gladhouse Reservoir on 24th December (R.W.J.S.) and 100 at Portmore on the 30th (D.G.A.).

St Mary's Loch, Selkirk—130 on 17th December (J.B.).

Eaglesham, Renfrewshire—100 on 25th December (L.A.U.).

The only acceptable record of **Lapland Buntings** this winter was of a flock of 14 seen in a field near Gullane, East Lothian, on 7th January (W.K.B.).

Plumage and structural abnormalities

A pale oatmeal-coloured **Grey Lag Goose** was seen amongst a flock of at least 1,000 near Dunragit, Wigtownshire, on 2nd January (A.D.W.). On 8th January a similarly coloured **Pink-footed Goose** was seen in a large flock at Newburgh, Fife (T.S.). An apparently adult **Whooper Swan** at Loch Ken, Kirkcudbrightshire, on 26th January had the normally yellow patch on the bill of a pale pink colour (A.D.W.).

One of two **Woodcock** flushed at Manderston, Berwickshire, on 31st December had very conspicuous white underparts (S.J.C.).

What the observer considered to be an albino **Herring Gull** was present in Stornoway harbour on 18th November. At a distance it looked all white and was at first mistaken for a Glaucous Gull. At close quarters the mantle and wings were seen to be of a very pale grey and the wing-tips were medium grey, bearing exactly the same pattern of "mirrors" as in the Herring Gull. Legs were pink (M.F.M.M.). What was probably the same bird had been seen in the same place by M.Ru. on 18th February 1961.

A **Starling** with a curved beak about 3 inches long was seen at Prestwick on 30th November (R.M.R.).

Miscellaneous observations

A salmon was found in the eyrie of a pair of **Golden Eagles** in Lewis in 1961 (W.A.J.C.). Another curious food item was a dead Hare on which a **Long-eared Owl** was feeding near Boat of Garten, Speyside, on 9th November (R.H.D.).

At Cramond, Midlothian, where the woods come down to the high tide line, **Blue** and **Great Tits** regularly come down to pick over the seaweed (T.C.S.).

A brood of 3 young **Greenfinches** at New Cumnock, Ayrshire, did not fledge until 13th September—an unusually late date (J.A.B.).

Corrections

The **Manx Shearwater** recorded inland at Dalry (*antea* 1: 495) was found on 15th, not 16th, September. It was successfully kept alive, mainly on chopped herring, until 2nd October, when it was released at Balcary Bay (A.D.W.).

In view of a conflicting claim that the bird concerned was a **Smew**, the observers have agreed that the **Black-necked Grebe** recorded from the River Endrick (*antea* 1:436) should be withdrawn.

The **Greenshank** at Hamilton (*antea* 1:503) was recorded on 29th August, not 29th September (D.R.W.).

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

SUMMER EXCURSIONS

Members are reminded that they may attend Excursions of Branches other than their own if they wish to do so.

ABERDEEN

Sunday 13th May

GLENTANAR (subject to permission being granted)—Leader, Mr C. Murray. Meet Bridge of Ess 10.30 a.m. Bring picnic lunch and tea.

Saturday and Sunday 2nd/3rd June

LOCH GARTEN AREA—Leader, to be announced later. Meet Loch Garten 6 p.m. on Saturday 2nd. Members to make own arrangements for overnight accommodation.

Sunday 17th June

FOWLSHEUGH CLIFFS (by boat from Stonehaven)—Leader, Dr G. Dunnet. Meet Stonehaven Harbour 2 p.m. Bring picnic tea.

Sunday 1st July

BEN a' BHUIRD (for Dotterel)—Leader, Miss E. A. Garden. Meet Allt Dourie Cottage, Invercauld (subject to permission being granted) 10 a.m. Bring picnic lunch and tea.

Sunday 4th November

LOCH OF STRATHBEG (large concentration of wildfowl, including Whooper Swans)—Leader, Miss E. A. Garden. Meet south end of loch 10.30 a.m. Bring picnic lunch and tea.

Members wishing to attend **Glentanar** Excursion, please notify Mr C. Murray, 20 Ivanhoe Road, Garthdee, Aberdeen, **one week in advance.**

For all other Excursions, please notify Miss E. A. Garden, Eider Cottage, Newburgh (Tel. Newburgh 615) **one week in advance.** All transport will be by private cars, so will Members with spare seats please notify Mr Murray or Miss Garden, depending on Excursion. Expenses will be shared.

DUMFRIES

Members to make own arrangements for transport. Picnic lunch and tea to be taken to Bass Rock, picnic tea only on other Excursions.

Saturday 5th May

ORROLAND BAY, KIRKCUDBRIGHTSHIRE—Leaders, Mr H. M. Russell and Mr Donald Watson. Meet Ewart Library 1.30 p.m. or rendezvous Dundrennan Post Office 2.45 p.m.

Saturday 2nd June

DRUMLANRIG WOODS—Leaders, Mr J. Maxwell and Mr J. Young. Meet Ewart Library 1.30 p.m. or rendezvous Queen's Drive, Drumlanrig 2.15 p.m.

Sunday 15th July

BASS ROCK (by kind permission of Sir Hew Hamilton-Dalrymple, Bart.)—Leader, Mr R. T. Smith. Meet Ewart Library 9 a.m. or rendezvous at North Berwick Harbour at 12.15 p.m.

Saturday 25th August

ARBIGLAND SHORE—Leaders, Mr E. L. Roberts and Mr R. T. Smith. Meet Ewart Libray 1.30 p.m. or rendezvous at Carsethorn 2.15 p.m.

DUNDEE

When private cars are to be used, applications for all Excursions should be made one week in advance to Mr Jack Scobie, 11 Nevill Street, Dundee (Tel. Dundee 86209).

Sunday 25th March

LINTRATHEN AND KINNORDIE LOCHS—Meet City Square 10 a.m. Transport by private cars. Bring picnic lunch and tea.

Sunday 27th May

NORTH ESK AND AUTHMITHIE—Meet City Square 10 a.m. Transport by private cars. Bring picnic lunch and tea.

Sunday 24th June

CAIRNGORMS (for Dotterel)—Members will be restricted to cars available. Arrangements will be made known later.

Sunday 15th July

ISLE OF MAY—Number limited to 12. Leave on 10 a.m. Tay Ferry. Transport by private cars. Bring picnic lunch and tea.

Sunday 23rd September

EDEN ESTUARY (GUARDBRIDGE TO ST ANDREWS)—Meet Tay Ferries 9.45 a.m. Transport by bus. Bring picnic lunch

EDINBURGH

Times of buses and trains should be checked with Summer Timetables. Costs may also be subject to alteration. Private hire buses will only be provided at charges shown on condition that a minimum of 30 attend. Anyone unable to attend, having booked a seat, may be required to pay the fare unless one week's notice is given.

Saturday 5th May

ABERLADY BAY NATURE RESERVE (Spring Migrants)—Leaders, Mr W. K. Birrell and others. Meet Timber Bridge 2.30 p.m. Bring picnic tea (S.M.T. bus leaves Edinburgh Bus Station at approx. 1.40 p.m.)

Saturday 12th May

HARPER RIG TO WEST LINTON (Moorland Walk)—Leader, Mr W. Brotherston. Wilson's (Carnwath) Bus leaves Castle Terrace 12.45 p.m. Bring picnic tea.

Saturday 26th May

PARADISE WOODS, DUNS—Leader, Mr William Murray. Private cars will be used and those attending are asked to state if they require a seat, or the number of spare seats in their cars, Expenses will be shared. Meet at Bridge over Whiteadder, Cumledge Mills, 2.30 p.m. Applications by 19th May to Miss Olive Thompson, 52 Inverleith Row, Edinburgh 3. Bring picnic tea.

Sunday 3rd June

THE HIRSEL, COLDSTREAM (by kind permission of the Earl of Home)—Limited number. Applications by 26th May to Mr A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Leader at the Hirsel, Major the Hon. Henry Douglas Home. Private bus leaves Waverley Bridge 11 a.m. returning approx. 7 p.m. Bring picnic tea. Cost: Bus approx. 8s.

Saturday 16th June

ISLE OF MAY—Number limited to 12. Applications by 9th June to Mr Alastair Macdonald, Hadley Court, Haddington (Tel. Haddington 3204). Train to Anstruther leaves Waverley Station 9.10 a.m. Boat leaves Harbour 11.40 a.m. prompt. Return train leaves Anstruther 6 p.m. Bring picnic lunch and tea. Cost: Day Return rail ticket 12s 6d; boat approx. 9s.

Sunday 1st July

FARNE ISLANDS—Limited number. Applications by 23rd June to Miss Olive Thompson, 52 Inverleith Row, Edinburgh 3. Private bus leaves Waverley Bridge 9 a.m., arriving Seahouses 12.30 p.m. Boats leave Harbour on arrival. Bring picnic lunch. Costs: bus approx. 11s; boat approx. 11s. High tea will be arranged for those who apply for it. It is regretted that as places in the boats are limited to the number of seats in the bus, applications from those wishing to travel by private cars cannot be accepted.

Saturday 14th July

FIDRA AND FORTH ISLANDS (by kind permission of the R.S.P.B.)—Number limited to 12. Applications by 7th July to Mr Michael Robson, Little Bellwood, Glencorse, Penicuik (Tel. Penicuik 386). Boats leave North Berwick Harbour 2.30 p.m. and return approx. 7 p.m. Bring picnic tea. Cost: boat approx. 8s. N.B. If weather is uncertain, it is advisable to check with the leader on the morning of Excursion in case of cancellation.

Saturday 28th July

BASS ROCK (by kind permission of Sir Hew Hamilton-Dalrymple, Bart.)—Applications by 21st July to Mr John King, 103 Marchmont Road, Edinburgh 9 (Tel. MOR 2671). Boats leave North Berwick Harbour 2.30 p.m. and return approx. 7 p.m. Bring picnic tea. Cost: boat approx. 8s. Tickets must be obtained at the Harbour Office before embarking. Please note that car parking is no longer permitted at the Harbour, so Members should allow time for finding a parking place elsewhere. N.B. If weather is uncertain, it is advisable to check with the leader on the morning of the Excursion in case landing is impossible.

Saturday 15th September

ABERLADY BAY NATURE RESERVE (Autumn Migrants)—Leaders, Mr W. K. Birrell and others. Arrangements as for 5th May.

GLASGOW

Saturday 28th April

HAMILTON BIRD SANCTUARY (by kind permission of the Town Council of the Burgh of Hamilton)—Leader, Mr D. Stalker. Meet at gates leading to Municipal Golf Course at 2 p.m.

Sunday 3rd June

THE HIRSEL, COLDSTREAM (by kind permission of the Earl of Home)—Limited number. Joint Excursion with Edinburgh Branch. For applications and arrangements, see under Edinburgh Excursions. Own arrangements to be made for travel to Edinburgh.

Wednesday 6th June

BARR MEADOWS, RENFREWSHIRE—Leader, Mr G. H. Acklam. Meet at Lochwinnoch Station Yard at 6.30 p.m.

Saturday 9th June

LITTLE CUMBRAE (by kind permission of Little Cumbrae Estates Ltd.)—Leader, Miss W. U. Flower. Boat leaves Fairlie Pier 11.30 a.m. Fare approx. 4s. Bring picnic lunch and tea. Applications by 26th May to Mr G. L. A. Patrick, 11 Knollpark Drive, Clarkston, Glasgow. N.B. Members participating in this Excursion will be expected to sign an acknowledgment that they have read and agree to the conditions stated below:—

"The permission to visit Little Cumbrae is granted on condition that the company does not warrant the safety of the premises and is under no obligation to protect you from injury or damage by reason of the state of the premises. By entering the premises you will be deemed to have accepted these conditions."

Wednesday 13th June

HORSE ISLAND (by kind permission of the R.S.P.B.)—Leader, Mr G. Fraser. Boat leaves Ardrossan Harbour 6.30 p.m. Fare approx. 4s. Applications by 26th May to Mr G. L. A. Patrick, 11 Knollpark Drive, Clarkston, Glasgow.

Saturday, 16th June

LUSS ISLANDS, LOCH LOMOND (by kind permission of Sir Iver Colquhoun, Bart.)—Leader, Mr G. Patrick. Service bus via Balloch to Luss, alight at Bandry Bay ½ mile south of Luss. Ferry boat leaves 1 p.m. returning 5.30 p.m. Fare approx. 4s. Bring picnic tea.

Applications by 2nd June to Mr G. L. A. Patrick, 11 Knollpark Drive, Clarkston, Glasgow

Saturday 23rd June

HORSE ISLAND (by kind permission of the R.S.P.B.)—Leader, Mr G. Fraser. Boat leaves Ardrossan Harbour 2 p.m. Fare approx. 4s. Bring picnic tea. Applications by 9th June to Mr G. L. A. Patrick, 11 Knollpark Drive, Clarkston, Glasgow.

Sunday 1st July

EAST FLANDERS MOSS—Leader, Mr B. Weld. Meet at Easter Polder Farm, near Kippen, 10.30 a.m. Bring picnic lunch and tea. (N.B. The main object of this Excursion is the ringing of Lesser Black-backed Gulls. The going is very hard, there being no shelter and little or no dry ground).

Sunday 16th September

HAMILTON BIRD SANCTUARY (by kind permission of the Town Council of the Burgh of Hamilton)—Leader, Mr M. Forrester. Arrangements as for 28th April.

ST ANDREWS

Applications for all Excursions should be made to Miss M. M. Spires, 2 Howard Place, St Andrews (Tel. 852), not later than ten days before each Excursion. Transport will then be arranged.

Saturday 26th May

KILCONQUHAR LOCH (by kind permission of the Nairn Estates)—Leave St Andrews Bus Station 2 p.m. Bring picnic tea.

Saturday 2nd June

LINDORES LOCH—Leave St Andrews Bus Station 2 p.m.

Sunday 10th June

LOCH LEVEN—Leave St Andrews Bus Station 10 a.m. Boats leave the Sluices, Scotlandwell, for St Serf's Island at 11 a.m. Bring picnic lunch and tea.

Saturday 7th July

TENTSMUIR (by kind permission of Mrs Purvis)—Leave St Andrews Bus Station at 2 p.m. Bring picnic tea.

WEEKEND EXCURSION TO AVIEMORE

Arrangements have again been made with Mrs Grant, The Dell Hotel, Rothiemurchus, Aviemore (Tel. Aviemore 216) for a weekend Excursion to Speyside.

Accommodation for up to twenty Members has been reserved for the weekend 11th to 13th May at inclusive terms of 55s per person, as follows: bed on Friday 11th; breakfast, packed lunch, dinner and bed on Saturday 12th; breakfast and packed lunch on Sunday 13th.

Members wishing to come on this Excursion should book direct with Mrs Grant, mentioning that they are Members of the Club, and are asked to send her confirmation of their booking once it is made, and also to inform her if they require dinner on Friday evening (extra). Members may bring guests. Arrangements for transport by private cars should be made with Branch Secretaries. Thermos flasks should be brought.

CLUB LIBRARY

Members are reminded that the Club has a growing Library of bird books which is available for reference and study, and which also includes a Lending Section, and it is hoped that the fullest use will be made of this. While the Library is not yet comprehensive, during the past year the Library Fund has been used for the purchase of books to fill important gaps; this Fund is built up, firstly, by means of a small grant from the General Funds of the Club, and also by the profits from sales through the Book Agency. As this Fund is not a large one, the number of books we can purchase is naturally limited.

For this reason we wish to thank the many people who have so generously donated books, journals and reprints to the Library. Many of these we did not have, others have been used to increase the scope of the Lending Section. Members are therefore invited to donate any bird books which they do not require and we will be glad to accept them, with the provision that, should we already have them in duplicate, we may be allowed to dispose of them and use the profit for purchasing the scarcer books. We also intend to publish from time to time a list of books we do not have in the Library; these will include certain of the older books on Scotland which will be of great value for a broader study of changes in populations and conditions which have affected our bird life. A preliminary list is given below:—

Books wanted :

BRITISH ASSOCIATION. 1912. Handbook and Guide to Dundee and District; containing an article by James B. Corr, on the Birds of the Estuary of the Tay. (Dundee).
BRUCE, G. 1895. The Land Birds in and around St Andrews. (8vo Dundee).
FISHER, James. 1956. Rockall. (Bles. London).
GRANT, Elizabeth. 1899. Memoirs of a Highland Lady. (Murray. Edinburgh).
GRAY, J. 1959. How Animals Move. (Pelican A 454).
HUDSON, W. H. 1923. Rare, Lost and Vanishing Birds. (Dent. London).
HUNTER, D. G. 1934. Bird Notes in Angus and the Far North. (Arbroath).
LACK, David. 1947. Darwin's Finches. (Cambridge University Press).
LACK, David. 1956. Swifts in a Tower. (Methuen. London).
MATTHEWS, G. V. T. 1955. Bird Navigation. (Cambridge University Press).
MARTIN, Martin. 1698 (or later Editions). A Late Voyage to St Kilda (London).
PENNANT, T. 1772 (or later Editions). A Tour in Scotland and Voyage to the Outer Hebrides. (London).
PENNANT, T. 1777. Caledonian Zoology, in John Lightfoot's Flora Scotica.
SERVICE, Robert. 1902. A Vertebrate Zoology of Kirkcudbrightshire, in Maxwell's Guide to the Stewartry of Kirkcudbrightshire.
SHAW, Rev. Lauchlan. 1775. History of the Province of Moray.
STEWART, Malcolm. 1933. Ronay, a description of the islands of North Rona and Sula Sgeir together with their geography, topography, history and natural history, to which is appended a short account of the Seven Hunters or Flannan Islands. (Oxford).
THORNTON, Thomas. 1804 (or 1896). A Sporting Tour through the Northern Parts of England and . . . Highlands of Scotland (London).

Journals wanted :

Annals of Scottish Natural History. A bound volume for 1908.
History of the Berwickshire Naturalists' Club. 1831 et seq.

Proceedings and Transactions of the Natural History Society of Glasgow (later The Glasgow Naturalist). 1859 et seq.

The Scottish Naturalist. Vol. 1 (1871-2); Vol. 3 (1875-6); Vol. 7 (1883-4); Vol. 8 (1885-6); Vol. 9 (1887-8); Vol. 10 (1889-90); Vol. 11 (1891-2).

Proceedings of the First International Ornithological Congress. Vienna 1884; Second, Budapest, 1891; Third, Paris 1900; and Sixth, Copenhagen 1926.

CLUB LIBRARIAN

Owing to the volume of work now entailed in organising the Club Library, the Council would be glad to hear from anyone who would be interested in acting as Honorary Librarian to the Club. Some typing ability, knowledge of the literature and of Library procedure would be an asset but are not all essential. The work would include cataloguing books and Journals, selecting books which are required and exploring sources for their purchase, arranging for exchanges with other Libraries and Societies, and other matters connected with the expansion of the Library. Any Member or friend who has some spare time and is interested in books would find this work of great interest and could give invaluable help to the Club. It could be carried out at any time of the day or week and would not necessarily involve regular hours. The Secretary will welcome any enquiries and will be glad to explain more fully the work which is required.

OPERATION OSPREY 1962

The R.S.P.B. will once again require the assistance of volunteer wardens between 1st April and mid-August to guard the Ospreys at Loch Garten and to act as Guides to the public visiting the Observation Post in the Sanctuary area. Wardens will be accommodated at a Base Camp where food, tents and camp equipment will be provided free. Each person is however expected to bring his own sleeping bag and pillow slip. Provided a sufficient number of Wardens are available, preferably for periods of not less than a week at a time, each one will have every third day free of duties. A succession of female cook-caterers will also be required for the period.

Anyone wishing to assist should send full details and references as soon as possible to Mr George Waterston, 21 Regent Terrace, Edinburgh 7.

HANDBOOK OF BRITISH BIRDS

The Aberdeen University Field Station at Culterty is in urgent need of a set of five volumes of the Handbook for use at their Ringing Station. These need not be in good condition. The gift of a set from a Member would be greatly appreciated. Contact Dr George Dunnet, Culterty Research Station, Newburgh, Aberdeenshire.

SOLWAY WEEKEND EXCURSION

16th to 18th February 1961

Once again we were lucky with the weather. During the first weekend of the month, a party of members of the London Natural History Society visited Dumfries and had a very wet couple of days. Then, during the second weekend, members of the Edinburgh Natural History Society had to battle with gale force winds. For our own excursion we had a fine bright sunny morning, clouding over in the afternoon on the Saturday; and a cloudy showery mild day on Sunday.

On Friday night, members began to arrive at the County Hotel, Dumfries. We were sorry that the usual Irish contingent was unable to join us this year. After dinner we were entertained by Willie Brotherston with a tape-recording of Pinkfeet at a roost, and by Jim Young with some excellent colour slides of local scenery and birds.

We marshalled on Saturday morning at the Car Park beside the Nith, noting the Lesser Black-backed Gulls which we seem to see there every year. Bobbie Smith led the party of about seventy of us in a long convoy of cars down the road to Bankend and on to East Park where we were taken in charge by Langley Roberts, Warden of the Caerlaverock National Nature Reserve. It was good to hear the Skylarks singing. We walked out over the saltings towards the mouth of the Lochar and got excellent views of some 2,000 Barnacle Geese. We then proceeded westwards to Glencaple where we parked on the jetty and had our picnic lunch watching Goosanders floating down the river. Back to Dumfries we took the New Abbey road to Carsethorn to see Scaup and lots of Knots. A fine Grey Plover was also seen.

Willie Austin then directed us over an attractive hill road by Auchenfad and Trostan to Loch Arthur. Several Barn Owls were seen on this route; indeed, over the weekend, at least ten different individuals were noted. Among parties of tits, we observed Willow and Long-tailed. Visits were paid to Milton Loch and Lochrutton before returning to Dumfries.

On Saturday night we all squashed into "Prince Charlie's Lounge" in the Hotel to take part in a "Bird Quiz" devised by Andrew Macmillan who was unfortunately not able to be present. Willie Brotherston and Paul Barbier defeated a local team—Willie Austin and Bobbie Smith, after the latter had beaten a Glasgow team composed of George Patrick and T. D. H. Merrie. More colour slides were shown thereafter.

Sunday saw us setting off in convoy for Castle Douglas via Auchenreoch. At Carlingwark Loch we met up with Donald Watson who acted as our guide from then on. A flock of geese came over from the direction of Kelton—probably Bean Geese which we failed to see later. There were fewer duck than usual on Carlingwark—and no Smew this year. We had a look at the Gelston burn marsh, getting fine views of a Barn Owl hunting; then round by Mid Kelton, across the Bridge of Dee, and up to Glenlochar. Here we turned right and visited an area near Mains of Greenlaw. Among a party of Grey Lags were two fine Snow Geese. We sat in our cars eating our lunch and admiring them. When the geese eventually took to flight we could see that the Snows were considerably smaller than the Grey Lags. The next excitement was a Green Sandpiper which flew over and plummeted into a nearby ditch. While the whole party watched, the bird was flushed and everyone got magnificent views of it as it flew overhead and then dropped down again into another ditch.

Donald Watson then led us on up the west side of Loch Ken to Livingstone, stopping at various vantage points to watch Greenland White-fronted Geese, Pintail, Shoveler, and a pair of Gadwall. Towards the head of Loch Ken, more Willow Tits were seen. At New Galloway we turned westwards to visit Clatteringshaws Reservoir before going on to Dalry and Bridge of Ken Hotel for tea and the close of the excursion. The total "bag" of species seen by members of the party was 88—so we were all well satisfied.

Our warmest thanks to the Dumfries Branch for yet another memorable weekend.

G. WATERSTON.

"A Real Paradise for Birdwatchers"

THE enormity of the landscapes and the ever recurring contrasts of Icelandic scenery have a unique attraction to tourists and bring them back again year after year. And to the ornithologist, it is a veritable treasure house. It has often been referred to as "a real paradise for birdwatchers" because of its wealth in bird-life. About 70 species nest there and more than 200 have been observed. Most of the birds that flock in Iceland find there a land of peace where they are protected by the unwritten law of kindness; consequently they are tamer there than in most other places.

Although Iceland is not an arctic country some true arctic birds can be studied there such as the Little Auk, the Purple Sandpiper, the Grey Phalarope, Brunnich's Guillemot and the long-tailed duck. The Sea-eagle is still found there and the famous Iceland Gyr-falcon is not uncommon. A Snowy Owl flapping over a pitch black lava stream is an impressive sight. Even the capital, Reykjavik, has some interesting bird inhabitants. On an islet in the Lake Tjornin, the Arctic Tern breeds in great numbers. Red-necked Phalaropes often flock on the lake which is also alive with ducks of many species. An hour's drive from Reykjavik to the old seat of the Icelandic Parliament at Thingvellir may result in the thrilling sight of the Great Northern Diver which breeds nowhere else in Europe. A flight of half an hour brings the ornithologist to the rich bird cliffs of the Westman Islands. The rocky island, Eldey, off the Reykjavik peninsula, is occupied by about 15,000 pairs of North Atlantic Gannet, the largest single colony of the species in the world. On the oases south of Hofsjokull, is the world's largest breeding colony of the Pinkfooted Goose.

Lake Myvatn in northern Iceland has been called the Mecca of bird watchers. This five mile by eight mile lake, which is also renowned for its unrivalled scenic beauty, has the largest concentration in Europe of breeding ducks. Fifteen species nest there; two of them, the Barrow's Goldeneye and the Harlequin Duck, nest nowhere else in Europe outside Iceland.

The total number of ducks and ducklings on the lake in late summer has been estimated at 140,000. At Myvatn, a unique form of peaceful coexistence between man and bird has developed through the ages. On the idyllic island of Slutnes, in order to look at their eggs, one has to lift some of the ducks from their nests.

For full details of this enchanting country and how to get there, contact ICELANDAIR, 33 St Enoch Square, GLASGOW, C.1 (Tel. CITY 3638). There is a daily service by modern Viscount aircraft and special reduced rates are available for group travel.

BIRD CONSERVATION

THE aim of bird conservation is to promote the richest and most varied bird-life possible. Man's commercial developments often threaten species which require highly specialised habitats ; we try to combat this by creating Reserves in such areas.

The Society has assisted with the re-establishment of "lost" indigenous species by creating the right conditions for them to recolonise their old haunts. This was achieved at Havergate by regulating the water-level by artificial means so that Avocets could breed ; and in the case of the Ospreys at Loch Garten by preventing human predation in the form of egg-collecting. Experiments are being carried out with nest-boxes for Golden-eye duck in the hope that we may induce this species to breed in Scotland.

A further example of a positive step in bird conservation was the elimination of rats on Fidra where they had decimated the tern colonies on this island. The Society successfully exterminated the rats, and the terns now breed successfully.

The Society was largely instrumental in persuading the Government to ban the use of aldrin, dieldrin, and heptachlor for dressing spring-sown grain, thus reducing the wide-spread damage to birds and wildlife caused by these toxic chemicals.

In 1961, the Society established Reserves at Horse Island (off Ardrossan) ; and at Inchmickery, Fidra, Lamb, and Eyebroughty in the Firth of Forth. In 1962, further Reserves will be declared.

All these activities cost money. As a bird-watcher we appeal to you to support the work of the Society by becoming a Member at an annual subscription of one guinea (10s if under 21 years of age). This subscription entitles you to copies of the Society's quarterly journal "Bird Notes."

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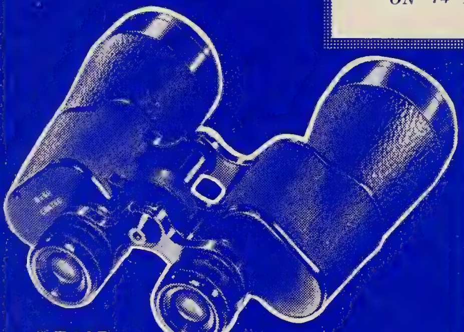

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SCOTTISH BIRDS

The Journal of
The Scottish Ornithologists' Club

Vol. 2 No. 2 *Summer 1962*

FIVE SHILLINGS

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Dumfries, Dundee, Edinburgh, Glasgow and St Andrews, at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish Ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited, and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. Joint membership is available to married couples at an annual subscription of 40/-. "Scottish Birds" is issued free to members, but Joint members will receive only one copy between them.

The affairs of the Club are controlled by a Council composed of the Hon. Presidents, the President, the Vice-President, the Hon. Treasurer, the Editor and Business Editor of "Scottish Birds," the Hon. Treasurer of the House Fabric Fund, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

An official tie with small white Crested Tits embroidered on it can be obtained in dark green or in navy blue by Members only from Messrs R. W. Forsyth Ltd., Princes Street, Edinburgh, or 5 Renfield Street, Glasgow, C.2 at a cost of 16s 9d post extra. A small brooch in silver and blue can be obtained for the use of Members of the Club. Price 2s 6d each from the Secretary, or from Hon. Branch Secretaries.

Forms of application for Membership, copy of the Club Constitution, and other literature is obtainable from the Club Secretary, Mrs George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7. (Tel. Waverley 6042).

CLUB-ROOM AND LIBRARY

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to Members during office hours, and on Wednesday evenings from 7 to 10 p.m. during the winter months. Members may use the Reference Library and borrow books from the Duplicate Section. Facilities for making tea or coffee are available at a nominal charge and Members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen can be used for the informal showing of slides at a charge of 2s 6d per night to cover the replacement of bulbs

THE BRITISH TRUST FOR ORNITHOLOGY

was founded in 1932 to encourage the study of birds, with particular reference to field-work. The national Ringing and Nest Record Schemes are two permanent activities, and special enquiries are carried out each year to study the status and habits of different species.

Subscription—Life member, £37 10s; Ordinary member, £1 10s p.a.; reduced rates for students and members aged 17-21.

PUBLICATIONS

BIRD STUDY A quarterly journal, free to members.

The issue for June 1962 includes papers on Weights of Pink-footed Geese in Autumn (J. V. Beer and H. Boyd), Difficulties in Ageing the Herring and Lesser Black-backed Gulls (M. P. Harris), Nightjar Enquiry, 1957-58 (J. Stafford).

BIRD MIGRATION Twice-yearly, subscription 7s per annum.

The forthcoming issue contains an analysis of the spring migration of 1962 over the British Isles; also papers on Falls of Night Migrants on the English East Coast (D. Lack and J. L. F. Parslow), and the Nature of 'Leading-line' Behaviour (Kenneth Williamson).

FIELD GUIDES

No. 1: *Trapping Methods for Bird Ringers,* new revision by C. D. T. Minton and R. Spencer, in preparation.
No. 2: *Binoculars and Telescopes for Field Use,* by J. R. Hebditch. Revised 1961. 2s 6d (post free).
No. 3: *Nestboxes,* by Edwin Cohen. Revised 1961, 3s (post free).
No. 5: *Treatment of Sick and Wounded Birds,* by F. B. Lake, 8d (post free).
No. 6: *The Bird in the Hand,* by R. K. Cornwallis and A. E. Smith. Illustrated by E. A. R. Ennion. Handling, ringing and examination of birds. Guide to sexing and ageing of over 60 common species. New revision in preparation.
No. 7: *Identification for Ringers,* 1: Acrocephalus, Hippolais and Locustella, by Kenneth Williamson, 3s 6d (post free).
No. 8: *Identification for Ringers,* 2: Phylloscopus, by Kenneth Williamson. Ready June 1962, 7s (post free). Coloured plate by D. I. M. Wallace.
Pocket Field List of European Birds, 6d (postage 2d). 6 for 3s (post free). Reduction for large orders.
Simplified Field List of British Birds, 12 for 2s 6d post free (minimum order).

Further details and information from: The Secretary,

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Animal dispersion in relation to social behaviour. By Professor V. C. Wynne-Edwards. 1962. Pp. XII + 653; diagrams, colour, and black and white plates. 55/-. Just published by Oliver & Boyd. A superb presentation of a highly original and controversial theory. Available from the Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh. **Buy through the S.O.C. and help the Library Fund.**

Fair Isle Bird Observatory Bulletins—back numbers. The Editor of "Scottish Birds" is anxious to obtain copies of Volume 1, Nos. 1. 2, 5 and 10 of the "Fair Isle Bird Observatory Bulletin" to complete his set, and will pay a reasonable price—either to the seller, or, if preferred, to the funds of the bird observatory. Copies of the 1952 and 1953 Annual Reports are also wanted.

The Birds of Aberlady Bay Nature Reserve. By Frank D. Hamilton and Keith S. Macgregor. 1960. 33 pages, 6 plates and map. 5/- (Postage 4d extra). A detailed check-list and study based on 10 years of weekly visits. Invaluable for anyone who watches birds at Aberlady, but equally useful as a guide to the birds likely to be seen elsewhere along the shores of the Firth of Forth during the year. Available from the Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh.

You are invited to send small advertisements for inclusion in this feature, which will appear when space allows.

SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 2 No. 2 **Summer 1962**

Edited by A. T. MACMILLAN with the assistance of D. G. ANDREW and T. C. SMOUT. Business Editor, ARTHUR J. SMITH. Cover design (Whimbrel) by LEN FULLERTON. *Published quarterly.*

Editorial

TWO extra items are being sent out with this issue of *Scottish Birds.* One is the long-awaited Index to Volume 1. Readers who want to have the volume bound should carefully fill up the form on the cover of the index and send off the various parts, with payment for the binding, as soon as possible.

The other is a Special Supplement on The Birds of Tentsmuir by J. Grierson. The birds of this area have been noted for many years by Mr Grierson, and before him by the Berrys of Tayfield and others, and it is most valuable to have a record of these observations from such an interesting area. The face of Tentsmuir is changing still, and it will be very interesting in future years to be able to compare the birdlife with what is presently recorded.

To some it may seem dull and unimaginative to visit the same place every weekend, but it is not so. Little things take on a meaning which one misses on a single visit; the more often one goes back the more one gets from each visit, so that the value of a series of records is far more than the sum of the individual records. After many visits, over several years, one can talk with conviction about what happens in a normal year—"Swallows seem scarce this year," "Whimbrel should be here soon," "Why have the Moorhens not nested this year?"—then, after a few years more, one realises that there is hardly such a thing as a normal year.

One final thought. Do not get so engrossed in your chosen haunts that you grow old and die without ever writing them up. Though years of further study are needed you could at least send a progress report—*The first 50 years*—to be filed in the S.O.C. Library, even if you are not ready for publication in *Scottish Birds.*

AUTUMN MIGRATION AT ST KILDA IN 1961

W. E. WATERS

Introduction

There is a long history of ornithological observations from St Kilda, which because of its geographical position as the most westerly of the Western Isles of Scotland is of especial interest in the study of bird migration. Many of the old accounts mention migrants but there are only a few studies throughout a season of bird movement. Dr W. Eagle Clarke visited the island during the autumn migrations of 1910 and 1911 (Clarke 1912). Since 1957 the Armed Forces have been on the island and this has facilitated communications and hence the study of its natural history. K. Williamson and Dr J. Morton Boyd made records in 1957 and there have been others since from Service personnel—particularly Dr D. G. Boddington in 1958-59—as well as from visiting naturalists. The purpose of this article is to describe the autumn migration of 1961 and relate it to previous knowledge. Movements which may be in the nature of dispersal or accidental arrival on strong easterly winds of local birds from the Scottish mainland or Hebrides, are included, but mention of breeding species is made only where there is augmentation by migratory movement (*e.g.* Meadow Pipit).

Five new birds are added to the St Kilda list: Goldeneye, Velvet Scoter, phalarope sp., Goldcrest and Pied Flycatcher.

GENERAL OBSERVATIONS

I was on Hirta, the main island in the archipelago, from the end of May until 20th October 1961. Regular observations were confined to Village Glen, which was covered at least once and usually twice each day in August and September; other parts of the island were visited when time permitted. Village Glen is unquestionably the best place on the island to see migrants, in particular the area behind the Village Street, the valley of the Amhuinn Mhor and the boulder beach area. Migrant waders were seen on the sandy beach and on the rocks below the Manse in August and early September, while later in the autumn, and with strong southerly winds, they occurred on the grassland around the old crofts. Day to day observations of these areas gave a good indication of migration and the numbers involved.

Other areas that produced some migrants were the plantago sward of Ruaival (waders), Amhuinn Ruaival (Redwing and Redstart), the heights of Mullach Sgar and Mullach Geal (Ringed Plover, Golden Plover, Lapland and Snow Buntings), and sheltered places in the steep gulleys on the east side of

Oiseval (White Wagtail). As noticed by previous observers, Gleann Mor and the Cambir held few migrants. Sometimes Meadow Pipits, and occasionally White Wagtails and Wheatears, were numerous there for a day or so after arrival, before moving over the ridge into Village Glen. The few warblers that arrived seemed to find most of their insect food along the dry stone walls, particularly that above the boulder beach.

The main migrants passing through St Kilda are on their way to or from the far north-west—Iceland, Greenland and even the arctic islands of northern Canada. Less common in a station situated so far west, and on the "blind side" of the Scottish mainland and the Hebrides, are migrants from continental Europe and Scandinavia. Of the main passerine migrants from the north-west in autumn 1961, the Wheatear had an average strong passage through St Kilda, with a maximum of about 20 in any day, whereas Meadow Pipits and White Wagtails were less common than in some previous years, with maximum counts of about 60 and 10 respectively. This may have been due to the stronger than normal winds which occurred over the sea area between Iceland and north-west Scotland. In September the wind was about twice its average speed and mainly south-westerly, and this may have resulted in more birds making landfall to the north and east of St Kilda than in an average year.

Many of the rarities on Fair Isle and the east coast of Britain arrive from continental Europe and Scandinavia. In 1910, and to a lesser extent in 1911, Clarke had an impressive list of such migrants at St Kilda. That these were exceptional years has been shown by Williamson and Boyd (1960), and confirmed by subsequent observations. One of the striking features of St Kilda, to one who is familiar with other west coast island observatories, is the scarcity of migrants, especially in the early autumn. Despite the regular searches in Village Glen I saw only eleven species of passerine migrants during the whole of August and September. Excluding the Wheatear, Meadow Pipit and White Wagtail only about 20 individual passerines were seen in these two months. Although this period has produced interesting migrants in past years their paucity in 1961 was probably not very exceptional. On an island so high and conspicuous as St Kilda (Conachair towers 1,397 feet above the sea), and fifty miles from the nearest land, this must indicate little migration in the area. My general impression, backed by observations of individual birds, was that most migrants remained on the island for some time—almost always twenty-four hours and often up to a week and more. They would move around until they found a suitable area, and they could be seen there regularly on subsequent days. A Knot, ringed in arctic Canada six years ago, remained on the island for at least 18 days, and this seemed the general rule for waders and ducks, and to some extent for the common passerines, though this was not so for the Wheatear, White Wagtail and Meadow Pipit in 1957 (Williamson—personal communication).

The wader migration, involving 13 species, started in early July and was fairly continuous until at least mid October, though never heavy. Turnstone and Golden Plover were the most numerous species, each reaching a maximum of about 35 in October. All the waders involved had Icelandic or high-arctic breeding distributions except the Jack Snipe which arrived with other Scandinavian birds in early October. The scarcity in autumn of Purple Sandpiper (none) and Whimbrel (one only) is confirmed by my 1961 observations. Merlins also were uncommon, but this is a species which is frequent at this season on Fair Isle and it seems clear that these birds use different routes in spring and autumn (Williamson 1954, Williamson and Boyd 1960). The gulls recorded in autumn are probably mainly local birds blown out from the Hebrides by easterly winds. The Slavonian Grebe and Arctic Tern are probable Icelandic migrants but records are not numerous at St Kilda.

MONTHLY MOVEMENTS

July. Wader migration started early in the month; there were two Swifts on 2nd and a Great Skua on 26th.

August. This month saw the main passage of Meadow Pipits and White Wagtails and more waders but otherwise there was little movement. The wind over the Iceland/Hebrides sea area was more westerly and appreciably stronger than normal.

September. An unidentified warbler was seen on 2nd; the 3rd produced a Curlew, *c.* 10 large Wheatears, a Redstart and *c.* 15 Meadow Pipits. A Goldcrest and a Lapland Bunting, not seen until 5th, may well have arrived with the same movement. Although the Curlew, Goldcrest, Redstart and warbler must have come from more easterly longitudes, the Wheatears and Meadow Pipits were probably Icelandic in origin. Their simultaneous arrival on St Kilda can be accounted for by the high pressure system between Iceland and north-west Scotland giving light winds and even calm conditions on 2nd for the Iceland/Hebrides crossing, and moderate north-east winds over the Hebrides (Stornoway) drifting the species from the east. Alternatively the Icelandic migrants could have followed the inter-island route by the Faeroes, Shetland and Orkney, for which conditions were good, and been drifted to St Kilda with the other species.

Strong east winds produced one Rook, one Swallow, one House Martin and two Lapwings on the 17th.

October. The main migration of the autumn was from 4th to 11th October. The origin of much of this was the continent of Europe, and the birds probably arrived in the light easterly airstream to the north of a low pressure area which passed over the British Isles on the 7th. The majority of species occurring were obviously from east of St Kilda—Pied Flycatcher (5th), Song Thrush (6th), Willow Warbler and Chiffchaff (7th), and Blackbird (8th). Two were definitely Scandinavian—the Red-throated Pipit on 7th and Jack Snipe on 8th. During this rush there were arrivals also of possibly Icelandic birds such as Merlin, Redwing, Wheatear, Meadow Pipit and White Wagtail, but their appearance does not fit with good conditions for the direct crossing from Iceland.* The occurrence on St Kilda of Icelandic migrants with an easterly wind has been noted before (Clarke 1912, Williamson & Boyd 1960). It has been suggested that some birds from the far north-west may make their first landfall in the British Isles to the north and east of St Kilda, arriving on the latter with easterly winds as they migrate down the west coast. This is probably what happened to the Icelandic migrants during the period 4th to 11th. Arrivals at St Kilda during easterly winds do not however necessarily mean that this has been their route, as a direct crossing may also have been possible, as is shown by the early September movement described above.

A depression over the southern part of the North Sea on 13th October produced the first easterly winds over Shetland (Lerwick) and the Hebrides (Stornoway) since the 8th, and probably brought the Bluethroat caught on the evening of the 13th.

SPECIES LIST

The following list includes all migrants seen between 1st June and 20th October 1961.

Great Northern Diver. Two which summered in Village Bay were joined by a third on 1st and 2nd Sept; one irregularly from 12th Sept until 8th Oct.

Slavonian Grebe. A small grebe, probably of this species, on 12th, 13th and 17th Sept; one from 4th to 14th Oct.

Heron. One seen by R. Harding on 7th Aug.

Teal. Five in Gleann Mor on 23rd Aug; one in Village Bay on 30th Sept.

Tufted Duck. One drake on 17th Sept after easterly winds the previous day. First autumn record.

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*It is worth noting the correlation of arrivals of Redwings at St Kilda (5th October), Skerryvore (6th and 7th), and the Bass Rock (5th to 8th) revealed by the various articles in this issue of *Scottish Birds*. (See also *Bird Migration* 2: 80-81 and 130-131).—Ed.

Long-tailed Duck. A drake on 10th Oct; a female or immature on 20th Oct. Previous records indicate that this species can be expected during the second week of October.

Common Scoter. One on 28th-29th Sept; three on 1st Oct; thereafter one or two on most days until I left on 20th Oct. All in Village Bay, and none adult drakes.

Velvet Scoter. A drake in Village Bay on 27th July remained until 1st Aug. First record.

Goldeneye. Two in Village Bay on 10th Oct, one remaining until at least 18th Oct. No previous record.

Red-breasted Merganser. A female or immature in Village Bay from 7th to 10th Oct.

Peregrine. There are many past breeding records but my only observations for 1961 were of an adult over Na h-Eagan on 2nd Aug and an immature chasing Golden Plovers on Mullach Sgar on 8th Oct. Soay and Boreray were not visited, so breeding there is not excluded and my records may have been of local birds.

Merlin. Two on 21st Sept; one on 4th Oct. One most days from 10th to 15th Oct was probably the same bird.

Oystercatcher. Breeding birds had all left the island by 5th Sept. Three on 17th Sept and single birds on 9th and 14th Oct were all preceded by easterly winds.

Lapwing. Two on 17th Sept; one on 6th Oct (remaining until 10th). Both arrivals followed easterly winds the previous day.

Ringed Plover. Two in Village Bay on 24th June; an immature from 15th July for four days; one or two on many days in Aug and Sept with a maximum of three on 5th Sept. Last recorded on 10th Oct.

Golden Plover. Occasional birds in June, July and Aug. on Mullach Sgar and Oiseval but breeding was not suspected. Fifteen migrants on 5th Sept, passage continuing at least until 17th Oct. Maximum count c. 35 on 10th Oct.

Turnstone. A few throughout the summer. Migrants started to arrive during the last week in Aug; largest flock 35 on 11th Oct.

Snipe. There was a decrease in the breeding population about mid-Sept, with probably less than 10 birds in Village Glen until 8th Oct, when there was a marked increase, to perhaps 25 birds—this number being maintained until I left the island.

Jack Snipe. Three in Village Glen from 8th until 14th Oct frequented the marshy area above the boulder beach and Tobar Childa. The only previous definite record is of one seen by Brownlow and Williamson on 21st Sept 1957.

Curlew. One on 7th Sept; one heard on 3rd and 14th Sept.

WHIMBREL. Two remained in Gleann Mor until 2nd July but breeding not established. One on 18th Aug was the only record for the autumn.

REDSHANK. Single birds on 20th and 24th July, 7th Aug and 4th-5th Oct. The previous latest autumn record was 10th Sept 1911.

KNOT. Two on 22nd July (one remaining until 28th July, one to 2nd Aug). One in partial red plumage on 19th Aug was trapped on 22nd and found to have an American ring. It had been ringed as a chick on 9th July 1955 at Slidre Fjord, Ellesmere Island, Canada. The bird remained on the island until 5th Sept. If this bird had left Ellesmere Island with an anticyclone on 16th Aug it would have met westerly winds over Davis Strait on 17th and could have arrived with on easterly-moving depression on 18th-19th. Another Knot, which arrived on 29th Aug, stayed four days.

DUNLIN. One on 12th June. Autumn passage very slight with three on 26th Aug and single birds thereafter on several days until 10th Oct.

SANDERLING. Autumn passage started with a single bird on 1st Aug and reached its peak in the first half of Sept with a maximum of five on 3rd Sept. One on 5th and 7th Oct.

PHALAROPE Sp. Two in Village Bay from 12th to 14th Oct were probably Grey Phalaropes *P. fulicarius* but identification is not certain. There are no previous records of phalaropes.

GREAT SKUA. One off Oiseval on 26th July, the month to which the great majority of St Kilda records refer.

LESSER BLACK-BACKED GULL. The breeding population started to leave in mid-Aug and all were gone by 6th Sept. One bird of the British race on 10th Oct.

COMMON GULL. One immature 15th-18th July, two adults 17th July, one 19th-21st Aug and 4th, 9th and 10th Oct.

BLACK-HEADED GULL. More frequent than the Common Gull; highest numbers, seven on 20th July and 10th Oct. With 14 out of the 29 arrivals the wind had been from an easterly direction in the previous 48 hours.

COMMON/ARCTIC TERN. Single terns, thought to be Arctic, seen over Village Bay on 30th Sept, 2nd, 4th, 5th, 7th and 10th Oct and at least two on 12th, 14th and 15th Oct.

SWIFT. Two on 2nd July, a month of many previous Swift records.

SWALLOW. Single birds on several days in June and July. One on 17th and two on 20th Sept probably came with the esterly gale on 16th. Only one previous record later than July.

HOUSE MARTIN. Up to four in early June; one 17th Sept. Like the Swallow, rare in autumn; no previous Sept record.

ROOK. An adult on Ruaival on 17th Sept. There appears to be only one other record this century—in May 1957 (Williamson).

Fieldfare. Three on 8th Oct.

Song Thrush. One on 6th Oct. Recent records are rare although this species bred on St Kilda last century.

Redwing. First seen on 5th Oct when there were at least 100 in Village Glen and the surrounding hills. This number soon dropped, but a further 30 or more arrived on 8th. Only about ten remained when I left on 20th.

Blackbird. Female on 8th Oct; first winter male on 11th.

Wheatear. Many of the local birds left in the last week of Aug. Marked increase of larger Wheatears on 8th Sept and perhaps again on 23rd. No Wheatears seen in early Oct but six noted on 8th, and one still present on 14th.

Redstart. Single females or immatures on 3rd Sept and 8th Oct. There are several previous autumn records.

Bluethroat. A first winter male was caught and ringed when it flew into a lighted building on the evening of 13th Oct. The race could not be determined with certainty. It weighed 14.6 grams. Seen again on 17th. The only previous record is of one in May 1959 recorded by Boddington.

Willow Warbler. Two on 7th Oct; one still present on 8th was a very pale bird showing the characteristics of the northern form—*P. t. acredula.*

Chiffchaff. One on the boulder beach on 7th Oct.

Unidentified warblers were also seen on 2nd and 23rd Sept.

Goldcrest. One on 5th Sept. No previous records although the species has occurred on the Flannan Isles and recently on North Rona.

Pied Flycatcher. One behind Village Street on 5th Oct. Another new species for St Kilda but likewise recorded from both the Flannans and North Rona.

Meadow Pipit. The first obvious migrants arrived on 7th Aug and further arrivals were suspected on 14th, 19th, 22nd, 23rd Aug and 3rd, 8th, 23rd, 26th Sept and 9th Oct. On only two occasions was there an easterly wind during the previous 24 hours. Passage was not as heavy as in some previous years, with a maximum count of *c.* 60 on 23rd Aug. Up to 30-35 were present on many days in Sept.

Red-throated Pipit. One above the boulder beach from 7th to 10th Oct has been accepted by the Rarity Records Committee. It was easily separated from the Meadow Pipits by its call. There are two previous records by Clarke for the autumns of 1910 and 1911. Further details appear elsewhere in this issue.

White Wagtail. Two on 2nd Aug with further arrivals on

6th, 10th, 19th, 23rd, 27th Aug, 8th and 26th Sept, and 7th Oct. Two of these nine arrivals followed winds with an easterly component within 24 hours, and four of them coincided with arrivals of Meadow Pipits.

Redpoll. Eight on 8th Sept, two on 6th Oct. Race not known.

Lapland Bunting. One on Mullach Sgar on 5th Sept, and another on 14th Sept, and c. 6 on 8th Oct.

Snow Bunting. One on 23rd Sept, seven or more on 1st Oct, and c. 12 on 8th Oct. Mullach Geal was their favourite haunt but single birds were seen flying over Village Glen.

I am indebted to K. Williamson and Dr W. J. Eggeling for help in preparing this paper and to the Meteorological Office for information and the loan of weather maps.

PRINCIPAL REFERENCES

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Williamson, K. 1954. The Migration of the Iceland Merlin. *Brit. Birds* 47: 434-441.

Williamson, K. & Boyd, J. M. 1960. *St Kilda Summer.* London.

Captain Waters' notes cover the autumn migration and arrival of winter visitors up to 20th October 1961. We have also received details from P. J. Fullagar of observations which he made on Hirta during the following month, from 8th to 17th November. The notes below have been selected from a complete list of observations kindly supplied by Mr Fullagar. The weather was clear, except on the 15th and 16th when it was cloudy with occasional drizzle. The Village Bay area was well covered, and the rest of the island was covered several times during work on the Soay sheep.—Ed.

Slavonian Grebe. One from 11th to 17th.

Heron. One over Village Bay, calling and circling, flew off NW on 13th.

Mallard. A drake on 16th.

Long-tailed Duck. A duck from 11th to 17th.

Teal. A duck on the tarn in Gleann Mor on 12th and 14th.

Red-breasted Merganser. One on 16th and 17th

Goose Sp. One, possibly a Grey Lag, on 14th.

Merlin. Single birds, possibly only one, on 11th, 12th, 13th and 14th.

Lapwing. One on 14th and 15th, and five on 16th and 17th.

Golden Plover. One on 10th, two on 15th.

Snipe. Frequently seen all over the island.

Woodcock. Two on 9th, three on 11th, three on 13th, four on 14th, and one on 15th. These may refer to a small movement as the birds were noted in different parts of the island.

Common Gull. Most seen was five on 15th.

Black-headed Gull. Two on 15th.

Short-eared Owl. One on 10th.

Skylark. One on 10th.

Fieldfare. Small parties of about ten present throughout in three different areas.

Redwing. Probably over 100 throughout; flocks of 10/20 commonly seen.

Blackbird. First seen on 11th. Census on 12th gave total of 17 on Hirta, mostly first winter cocks.

Waxwing. One on 14th. First record.

Goldfinch. Two on 9th. First record (see *antea* 2: 54).

Siskin. One in two places on 12th. First record (see *antea* 2: 54).

Chaffinch. One on 11th, and a cock and hen on 13th.

Snow Bunting. Seen from 9th; Hirta population about 50.

SOME NOTES FROM SKERRYVORE LIGHTHOUSE*

W. A. CAMERON

*Because of the remoteness of the place very few ornithologists have been able to visit Skerryvore. It lies in what is potentially a most interesting position from which to watch for migrants—12 miles out to sea on a line drawn SW through the islands of Coll and Tiree, and also more or less clear of any blanketting effect from the southern end of the Outer Hebrides some 30 to 40 miles NNW. A few notes from Skerryvore have appeared from time to time, but the only series of detailed observations which we have been able to trace was published over 50 years ago by James Tomison, Principal Lightkeeper of the time, based on his observations from 1903 to 1906 (*Ann. Scot. Nat. Hist* 1907: 20-31). His paper is well worth reading again, both for a description of the rock and for details of the birds seen, the great autumn rushes of migrants, and the appalling number of birds killed by striking the lighthouse and falling into the sea on dark misty nights. In 1958 Dr J. Morton Boyd, writing of "The Birds of Tiree and Coll," included published and unpublished records from Skerryvore, and his paper has a useful list of references to the literature (*Brit. Birds* 51: 41-56, 103-118). We are indebted to Dr J. W. Campbell for drawing our attention to this valuable summary.—Ed.

The observations which follow were made at Skerryvore Lighthouse, 12 miles south-west of Tiree, between 3rd and 23rd October 1961.

Manx Shearwater. Three on the 15th.

Eider. Flocks continuously present off the rock, except for a three day period of very heavy seas when number dwindled to less than ten. Numbers tended to increase, from 160 on the 4th to 398 on the 21st. This was the largest number seen in a day. The great majority were always drakes (*e.g.* 180 drakes in a flock of 205 on the 5th, and 225 in a flock of 253 on the 7th).

Whooper Swan. On the 14th three came from the direction of Tiree and flew close past the rock towards the south-west. It was foggy at times that day.

Kestrel. One arrived early on the 14th and stayed until just after 7 a.m. on the 15th.

Water Rail. One killed at the lantern on the night of the 4th, and one there the next night.

Golden Plover. Single birds on the 3rd, 7th and 16th, and three on the 10th.

Turnstone. Small parties of less than ten fairly regular.

Snipe. A single bird on the 10th.

Jack Snipe. Two on the 5th, one on the 6th, and five on the 7th. All were killed at the lantern.

Redshank. One caught early on the 8th, and a few others seen circling the tower.

Purple Sandpiper. Fourteen on the 7th, and 23 during stormy weather on the 23rd, were the highest numbers; up to eight on several other days.

Lesser Black-backed Gull. A single bird on the 3rd.

Black-headed Gull. A single bird on the 8th.

Kittiwake. The most numerous bird seen, with many hundreds in the vicinity on some days.

Common/Arctic Tern. One killed on the 4th; two seen on the 8th.

Skylark. One at the lantern on the night of the 6th, and several early next morning.

Wren. Single birds on the rock on the 6th, 7th and 8th.

Song Thrush. Two at the lantern early on the 7th, and single birds on the rock twice later that day.

Redwing. Considerable night passage noted; fairly heavy on the nights of the 6th and 7th, and a large passage of hundreds of birds at 1 a.m. on the 14th at a time of poor visibility and fresh SSW wind. No other species were seen with this last movement. There were a good many casualties.

Ring Ouzel. On the 5th one spent the night perched on the television aerial.

Wheatear. Light passage noted up to the 10th, with many birds involved on the nights of the 5th and 7th. Like the Redwing this species also suffered quite a number of casualties.

Black Redstart. On the 14th at 1600 hours with poor visibility and a fresh SW wind a single bird was observed flitting about on the rock. The day was dull at times but the bird was watched at eight to ten yards range with binoculars. Size as

Redstart; dull slaty grey overall with the underparts very slightly lighter; rusty on sides of tail and rump, with the centre tail feathers very dark; legs black. It was constantly flitting about on the rock. I checked the *Field Guide* immediately afterwards and the bird appeared to match exactly the illustration of a female there.

BLACKCAP. One found dead on the 7th.

MEADOW PIPIT. One at the lantern on the 5th, a few early on the 7th, and two on the rock during the afternoon of the 8th.

ROCK PIPIT. One during the afternoon of the 6th.

STARLING. Single birds on the nights of the 5th, 19th and 21st.

NOTES FROM THE BASS ROCK

J. B. NELSON

While living on the Bass Rock, East Lothian, during 1961 to study the Gannets there, I was able to make some notes on the breeding birds and migrants.

BREEDING BIRDS

The following passerines bred on the Bass Rock in 1961:

WREN. Four to six pairs.

HEDGE SPARROW. About five pairs.

ROCK PIPIT. An estimated ten pairs.

PIED WAGTAIL. Two pairs.

STARLING. Three or four pairs.

LINNET. A pair reared at least one brood below the castle in tree mallow.

HOUSE SPARROW. Three or four pairs around the battlements.

MIGRANTS AND VISITORS

HERON. Two immatures flying up Forth on 5th August.

COMMON SCOTER. Twenty to thirty off the rock on 2nd October.

PINK-FOOTED GOOSE. More than 100 flew over on 12th and 13th October (*cf. antea* 1: 500).

SPARROWHAWK. A female on 26th April.

PEREGRINE. Single birds several times throughout the year. Used to nest at one time.

Merlin. One on 23rd April. An immature bird caught a cock House Sparrow on 13th October.

Redshank. Single birds visited the rock in August, September and October.

Purple Sandpiper. Two on 6th March.

Greater Black-backed Gull. Over 200 roost on the Bass during the winter, arriving in October and dispersing in March. They come on to the flat parts of the rock at this season but never at other times.

Little Auk. An oiled specimen brought to the rock on 28th February 1962 by a Herring Gull.

Skylark. Many passed over on 2nd and 5th October and occasional birds on other dates in October.

Blue Tit. Following south-easterly wind there was a small invasion on 28th September and up to six were counted on the rock. Some remained, or were newcomers, on 2nd October.

Long-tailed Tit. A party of eight passed over on 1st November (*cf. antea* 1: 506).

Fieldfare. Five or six on 23rd April. Six or more on 31st October, and several on 2nd November.

Song Thrush. One on 7th March. Apart from one on 8th August none appeared in the autumn until 30th September. From then until 14th October there were always up to six on the rock.

Redwing. One on 11th and 26th April. First large autumn movements overhead on 5th October, continuing on the next three days.

Ring Ouzel. Hen on 6th and 7th April; cock on 23rd, 27th and 30th April. One on 2nd October.

Blackbird. One on 4th March, three on the 7th, one on 11th April, and one on 4th May. Two on 18th September. Main autumn arrival started on 3rd October, and at least six present until the 7th when about 50 were counted.

Wheatear. On April 11th (2), 13th (1), 26th (2), 27th (3), 28th (5+), 30th (5+), May 6th (2), 7th (2) and 12th (2). Undoubted large Wheatears on April 23rd (2) and 24th (1). First of the autumn seen on 9th August; then on 22nd, 31st, September 3rd (2), 5th (2), 18th (2), and 19th.

Whinchat. One cock on 27th April.

Redstart. Single cocks on 17th, 21st and 23rd April.

Robin. One on 9th March and 11th April. First of the autumn on 3rd September. On 3rd October several came to the rock, and on the 4th and 5th there were up to a dozen.

BLACKCAP. At least two hens and a cock on 3rd and 4th October.

GARDEN WARBLER. One trapped near chapel on 3rd October.

WHITETHROAT. One trapped on 5th September.

WILLOW WARBLER. Five on 11th April, including a lovely cream-headed bird with darker superciliary stripe and ear-coverts; then two on 17th, several on 21st, 23rd, 24th and 30th, at least twelve on 6th May, several next day and on 12th May and 5th June. About four on 10th August, 20/30 on 5th September, several on 5th October, and one or two on the 6th.

GOLDCREST. Single birds on 7th and 16th March, "scores" on the 17th, decreasing daily to one on 23rd, and a similar but smaller influx on the 27th. Started passing through in the autumn on 2nd September; odd birds throughout this month, then many on 8th October, and a trickle thereafter.

SPOTTED FLYCATCHER. Single birds on 5th and 18th September.

PIED FLYCATCHER. Noted on September 1st (hen), 3rd (4), 4th (2), 5th (3), 6th (2), 19th (1), and October 3rd (1). An adult female and three juveniles were trapped.

RED-BREASTED FLYCATCHER. One trapped and ringed on 3rd October. It was a female or immature bird.

MEADOW PIPIT. There was a strong passage starting on 5th September and continuing until 10th October. The resident Rock Pipits showed much aggression.

GREENFINCH. One on 8th October.

SISKIN. Quite an invasion starting with a dozen on 3rd October, and continuing till the 14th, when we left the rock for a period (*cf. antea* 1: 500, 508; 2: 54). After the 3rd there were never more than about six.

LINNET. Small parties of up to six birds frequently on the rock in March and April (see Breeding Birds section). Several small flocks throughout the first half of October.

CHAFFINCH. A cock on 2nd October, and single hens on the 5th and 8th.

BRAMBLING. One on 7th October, five or six next day, and one on the 10th.

REED BUNTING. A female or immature on 5th October.

SNOW BUNTING. One on 27th September, and two on 31st October. One or two may often be seen on the rock during the winter.

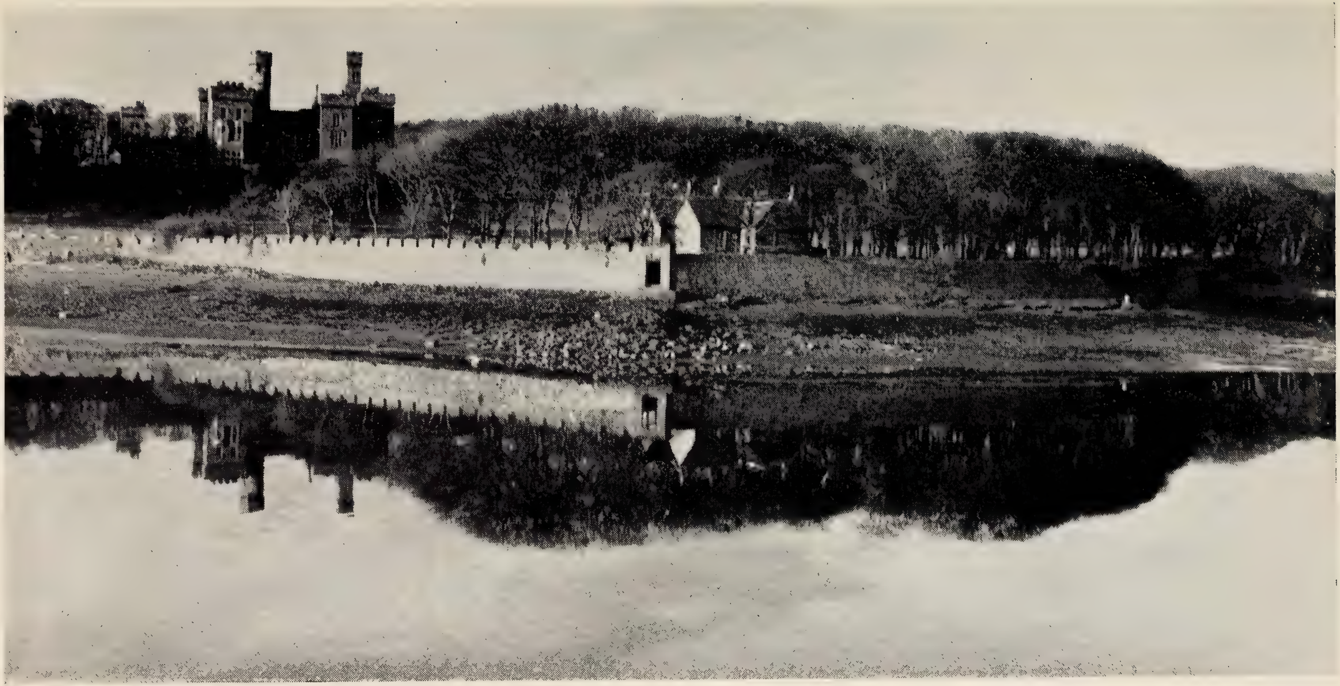

PLATE 4. STORNOWAY CASTLE and part of Stornoway Woods (see page 89).

Photograph by W. A. J. Cunningham.

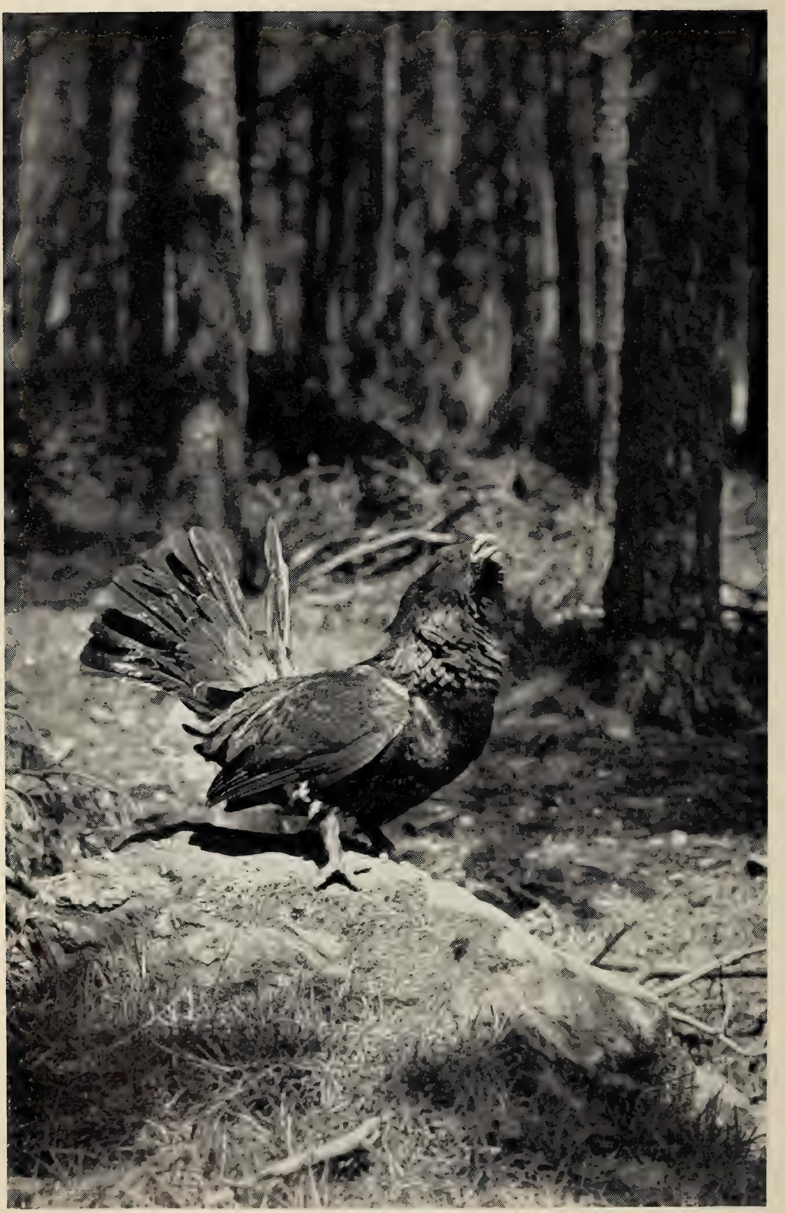

Plate 5. Aggressive cock Capercaillie, Angus, 1961. Note the characteristic display attitude with beak up and chin feathers standing out like a beard, and the white "headlamp" on the carpal joint of the wing (see page 81).

Photograph by C. E. Palmar.

AGGRESSIVE CAPERCAILLIES

The cock Capercaillie so excellently photographed by C. E. Palmar (Plate 5) lived in a small wood at the top of Glen Lethnot, Angus, for at least four years. It may have been older than this but it attacked human beings and other animals whenever they entered its territory in spring throughout this period. It probably owed its survival to the quietness of the area and to the close proximity of the keeper's house, since it many times attacked vehicles, including land-rovers and Post Office and other vans, sometimes landing on them, and if traffic had been frequent it might have perished sooner. It disappeared in June 1961 and presumably is now dead. In 1961 it jumped on top of Mrs Palmar when she tripped and fell in the wood, and it also attacked sheep in the wood and a horse in the meadow outside the wood, frightening the horse so that it confined its movements to the far end of the field. In 1961 this Capercaillie was trapped against a tree by a ewe with a lamb, and lost some of its tail feathers. It never attacked a dog, but with natural predators such as foxes, or lynx in Scandinavia, such a very aggressive bird would probably get killed quickly. It was more aggressive in 1961 than in 1960, when I was first shown it by C. Crystal, the head-keeper, and delivered quite hard blows with wings and beak, pecking viciously and often holding on. I felt its nip through my rubber boots. It was so aggressive in 1961 that it was necessary to hold the bird off with a forked stick in order to photograph it.

It was most aggressive within the wood, but readily came out of the wood on to the road or neighbouring grass field, except whenever Chris Mylne arrived with cine-camera to photograph it. Perhaps he looked too much like another Capercaillie. On other occasions Mr Crystal could often summon the bird by calling to it or by sounding the horn of his land-rover. It was aggressive between late February and the end of June and in all daylight hours. There was no obvious resurgence of aggression in the autumn ; and this was the only cock Capercaillie in the wood of 35-40 acres.

Scandinavian biologists with whom I have discussed this bird have not recorded Capercaillie attacking men there, but there are at least two other records in the Scottish literature. Seton Gordon described a bird in Rothiemurchus Forest that attacked children going to school and ladies with silk stockings (*The Highlands of Scotland,* 1951); and a bird in Glen Lyon was documented by W. Kenneth Richmond (1958) in the *Annual Report of the Scottish Field Studies Association.* Except for A. Walker, the other members of the Grouse and

Moorland Ecology Unit have not heard of any other aggressive Capercaillie ; but Mr Walker recalls one that attacked people near Corrour Station, Inverness-shire, in the springs of 1940-43, and tells me that when he shot a cock Capercaillie in August 1926 in Glen Tanar the wounded bird attacked him. A hen Capercaillie with young attacked a farmer near Banchory in June 1961 when he approached her brood. These last three records, however, are from a lifetime's experience of keepering in Scotland, and probably should not be interpreted as suggesting that aggressive Capercaillie are frequent. In most of these cases the birds lived near roads and they saw people frequently, and under these conditions Capercaillie may overcome their usual fear of men. Moreover in Scotland, where predators are usually destroyed, Capercaillie are less important gamebirds than in Scandinavia and are less frequently shot, and this may partly explain differences in behaviour.

It is often possible to approach Capercaillie in Scotland fairly easily and I have several times stood below trees containing cock and hen Capercaillie, not only in spring but also in winter. I have driven a car within seven feet of a cock in a birch tree in January, and have watched Capercaillie from the road near the Burn House at the foot of Glen Esk in Angus. During their song-display they periodically point their beaks skywards with their long chin feathers standing out like a beard, and this is traditionally an opportunity to stalk them. This display is sometimes given by birds in trees as well as on the ground, though the communal display sometimes recorded among Capercaillie may be confined to the ground. This can sometimes be seen in Scotland and Roy H. Dennis watched a lek in Upper Speyside in 1961. A very good account of display and territorial behaviour was published in 1961 in *British Birds* (54: 257-72) by H. G. Lumsden.

Captive cock Red Grouse frequently become very aggressive, striking and pecking at human beings ; and they will occasionally attack people in the wild. I do not know of any case of a Blackcock attacking people ; presumably they are teetotal and have not yet learned the bad habits of the Capercaillie (see D. G. Andrew (1958) *British Birds* 51: 191—last line).

DAVID JENKINS.

In attributing my failure to film the Glen Lethnot Capercaillie to my close resemblance to this handsome and magnificent bird, Dr David Jenkins does me an honour and gives a clue to its strange behaviour. It would appear that isolation from rival males of the species may explain the aberrant behaviour of these "rogues."* With no rivals to attack or display against, any other large moving object seems to release the very strong aggressive drive which these birds develop and which normally finds expression in the lek type of display against other cocks. In spring 1961, through the good offices of Dr Bruce Campbell of the B.B.C. Natural History Unit, the R.S.P.B. Film Unit succeeded in filming the displays of a similarly aggressive Capercaillie near Dunkeld in Perthshire. This bird lived in an extensive larch wood but was supposed to be the only cock Capercaillie in the area. Its territory was smaller than that of the Glen Lethnot bird, but it would still attack fifty yards or so from the mound which appeared to be the chief display ground. Its mate had a nest with eggs about the same distance away. It appears that the aggressive displays stop as soon as the hen moves away from the vicinity of the nest with the chicks, as observed by Mr Crystal. Unfortunately the nest of the Dunkeld bird was destroyed the day before our visit, but this did not appear to affect the aggressiveness of the cock in any way.

This cock Capercaillie had been recorded in the area for at least five years and was quite notorious in the district. It attacked any vehicle or person intruding into its territory but was apparently easily scared by a dog. I had first-hand experience of the attacks of both birds. Although I did not succeed in enticing the Glen Lethnot bird out into the open to record it on film, I was on one occasion driven backwards by it down the hill through the wood. It battered so hard at my tripod that I was prevented from taking super close-ups by "camera-shake." The Dunkeld bird was even more persistently aggressive. It was necessary, for personal safely, to hold the bird off with a forked stick against which it made persistent rushes, attempting to outflank the opposition. These attacks were kept up with no sign of flagging for over an hour on one occasion while David E. Bradley and I secured sound recordings at very close quarters of the complete repertoire of burps, gurgles, wheezes, hisses, rasps, clicks and pops which make up the cock Capercaillie's "song."

The calls are an integral part of the display and are of three main types:

(a) a repeated slow clicking made with the bill pointed up at an angle of 45°. This is often the first clue to the presence of the bird in the forest and seems to be a kind of warning note. It is made in the throat but the bill is opened at the same time. It is delivered either from a tree perch or on the ground and is usually the prelude to an attack.

(b) a bubbling tri-syllabic bellow, delivered only on the

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*It is possible that this isolation might be due to the resident cock's extreme aggression in the first place.—Ed.

ground during an aggressive forward run. The head and neck are held low to the ground, with the neck feathers fluffed out and the throat distended. The call and its delivery are similar to the bubbling of Blackcock on the lek ground, and it is definitely aggressive.

(c) the "song," where the clicking notes accelerate in a crescendo which ends in a loud pop, followed by a rhythmic gurgling in the throat and a quiet wheezing rasp which appears to originate in the chest. This latter sound is only audible at very close quarters. In fact the whole song is delivered as a muted performance, much effort producing a surprisingly small effect. The bill is pointed upwards almost vertically with the throat feathers erected like a beard.

A 16 mm film was obtained of the bird attacking first a car and its occupants, then its own reflection in a mirror, and finally a stuffed cock Capercaillie. The attacks were made mostly with the wings, one wing at a time being used to deliver a hard blow with the carpal joint. The bill was also used but not as the primary method of attack. When attacking the "rival" in the mirror, the bird hit the glass so hard with its wing that the carpal joint was bleeding after three or four blows and the mirror had to be withdrawn to prevent the bird injuring itself. During this fighting it was noted that the tail was lowered and used in the normal way to balance while positioning for an attack.

As an experiment the bird was presented with stuffed Capercaillies of both sexes. It found the stuffed cock an even stronger stimulus than Dr Bruce Campbell, who valiantly placed it in position, and to his dishonour it at once attacked the rival bird. When the bird and its stand had been knocked over. the attack consisted of treading and pecking at the head and eye, the red wattle appearing to stimulate the most vicious pecking. Some of the movements during this attack were very similar to sexual treading during coition. However the reaction of the bird to the stuffed hen was strikingly different. This skin, being unmounted, was presented in a prone position, and the cock at once approached from behind, mounted and several times attempted to mate with the stuffed hen. During this performance as well as treading on the back, it gripped the head of the hen with its bill at the nape of the neck, holding on but not pecking aggressively as it had done the head of the stuffed cock.

It has recently been reported by Col. A. M. Lyle, who kindly gave us permission to film the bird on his estate, that this bird also is now presumed to be dead.

C. K. Mylne.

THE WAXWING INVASION OF NOVEMBER 1961

ANDREW T. MACMILLAN

Introduction

November 1961 brought a widespread invasion of Waxwings to Scotland, but the numbers were less spectacular than in recent years. The previous invasion, in October and November 1959, has been described in *Scottish Birds* (*antea* 1: 241-251), and an analysis of the remarkable series of four invasions in that and the previous three winters has been made by R. K. Cornwallis (*British Birds* 54: 1-30). No large influx of Waxwings was noted during the winter of 1960/61.

When comparing the 1961/62 figures with those for 1959/60 it should be realised that the majority of records for the earlier invasion were received from the general public in response to appeals published in the *Glasgow Herald* and *Scotsman*. No such appeals were made in 1961/62, although some of the same people again sent in records. The sample is thus a much smaller one. Even so, it is clear that the invasion of November 1961 was on a smaller scale in Scotland than the 1959 one, though the reluctance of the Editors of *British Birds* (54: 442) to admit that the numbers merit the use of the term "irruption" is surprising. Perhaps after so many Waxwings in recent winters we are becoming a little blasé.

THE INVASION

A few Waxwings are reported from Orkney and Shetland early in October 1961 (*British Birds* 54: 442), but details have not been received. In any event these birds cannot be considered as part of the main invasion. There is one rather vaguely dated record from Levenhall "in October," and a "bevy" of Waxwings was seen on the 29th at Barcaldine. These are the only reports prior to 7th November.

In *British Birds* (*loc. cit.*) it is stated that Waxwings began to arrive in Denmark on 4th November, and in Britain on the 5th and 6th. The Scottish records detailed below indicate a fairly steady arrival of birds from 7th to 28th November with no obvious peak—unless perhaps from Tuesday 14th to Thursday 16th when a few larger flocks were noted. Below are listed all available November records, but there are also many observations which cannot be fitted into this list because they are not precisely dated. Against each date are noted first reports, or increases reported in localities where birds were already present. There is of course no guarantee that the birds had not been present for some time before they were noted.

7th—Burnmouth (7)
8th—Invergowrie (2)
9th—Gullane (4), Burnmouth (+2)
10th—Nairn (5)
11th—Dundeugh (6)
12th—St Andrews (9)
13th—
14th—Golspie (2), Stonehaven (14), Aberdeen (1), Broughton (2), Lockerbie (2), St Kilda (1)
15th—Aviemore (2), Newburgh (Aberdeen) (13), Manderston (25)
16th—Invergowrie (+14), Longannet (1)
17th—Golspie (+3), Kirknewton (1).
18th—
19th—Blair Atholl (24), Eyemouth (6), Coldingham (4).
20th—
21st—Inverness (2)
22nd—
23rd—Invergowrie (+4)
24th—Nairn (+9), High Valleyfield (2), Castle Douglas (1)
25th—Dornoch (4)
26th—Bonar Bridge (12), High Valleyfield (+2)
27th—Rosyth (2)
28th—Fort Augustus (2), Rosyth (+4), North Berwick (1)

There is very little evidence of fresh arrivals after the end of November. Subsequent records could all refer to birds that had been present in the country since November.

NUMBERS

It is difficult to arrive at exact figures, but the list at the end of this paper covers some 80 reports referring to approximately 375 birds. These figures should be compared with 400 reports referring to more than 2,100 birds two years earlier. Not too much should be made of the differences, however, because of the much more intensive collecting of records in 1959/60.

FOOD

Only a few observers gave details of the food taken by the birds which they recorded. Once again cotoneaster (18 reports) was top favourite, but berberis (7) and hips (7) were also popular, and juniper (2) and haws (1) were mentioned. A flock of Waxwings in St Andrews ate first *Cotoneaster horizontalis,* then *C. simonsii,* and finally rose hips when the cotoneaster was finished.

DETAILED RECORDS

Below are given details of the various reports received. The single Waxwing at St Kilda on 14th November 1961 is the first to be recorded there. Waxwings have now been noted in every division of every Faunal Area of Scotland (see *antea* 1: 244 for further details).

ORKNEY & SHETLAND

A few early in October ("British Birds" 54: 442).

MORAY BASIN

Sutherland

Golspie—2 on 14th Nov, 5 on 17th, 2's and 3's to 8th Dec (Dr I. D. Pennie).
Bonar Bridge—12 (2 killed by car) on 26th Nov (Dr I. D. Pennie).
Dornoch—3/4 from 25th to 30th Nov, and 1 on 14th Jan (D. Macdonald).

Inverness

Inverness—2 on 21st Nov (Dr M. Rusk), and 1 found dead on 13th Dec (Mrs U. Pennell).
Boat of Garten—1 on 1st Jan (R. H. Dennis)
Aviemore—2 on 15th Nov (Lt-Col. J. P. Grant), and 3 on 16th Dec (R. H. Dennis).
Fort Augustus—2 on 28th Nov ("Inverness Courier" per Dr M. Rusk).

Nairn

Nairn—4/5 from 10th to 12th Nov (per Dr M. Rusk), and on 23rd (6), 24th (15), 25th/27th (2), Dec 3rd (9), 6th (14), declining to 2 on 10th (C. MacLaverty).

Moray

Forres—"There have been quite a number of Waxwings in this area" (D. B. Cowie, 6th Dec); 4 on 7th Dec (Mrs M. G. Michie).

DEE

Aberdeen

Newburgh—13 on 15th Nov (Miss E. A. Garden)
Aberdeen—1 on 14th Nov (per E.A.G.).

Kincardine

Banchory—a small party (under 6) sometime before 9th Dec (W. Bain).

Stonehaven—14 on 14th Nov, and small parties daily to at least 9th Dec (W. Bain).

Inverbervie/Auchinblae—small parties (under 6) at each place some time before 9th Dec (W. Bain).

N.B.—These localities are not in Dee as marked on the map in "The Birds of Scotland." For an accurate map, based on the watershed, see "A Fauna of the Tay Basin and Strathmore."

Angus

Edzell—noted in mid-Nov ("Dundee Courier" 23rd Nov).
Coupar Angus—1 on 4th, and 2 from 5th to 10th Dec (Miss M. W. Forson).

Perth

Blair Atholl—24 on 19th Nov (Miss N. C. Wilson).
Comrie—3 on 7th Jan (Miss G. S. Somerville).
Invergowrie—in Nov on 8th (2), 16th (16), 20th (1), 22nd (7), 23rd (20) and some later (H. Boase).

Fife

St Andrews—7/9 on 12th Nov (Dr D. Douglas), 9 on 20th (Miss D. Miller), 8 on 22nd decreasing to 2 on 26th (Mrs W. Low).

FORTH

Fife

Kirkcaldy—2 on 19th Dec (J. B. Bease).
Rosyth—2 on 27th Nov, and 6 on 28th (Lt. P. J. Gayfer, R.N.).
High Valleyfield—2 on 24th Nov. and 4 on 26th (J. Hoy).
Longannet—1 on 16th Nov (J. Hoy).

West Lothian

Reported at Bathgate ("Edinburgh Evening News" 2nd Dec).

Midlothian

Levenhall—10 "in October" (Mrs Harrison).
Musselburgh—Reported in "Edinburgh Evening News" (2nd Dec)—possibly same as Levenhall record.
Pathhead—Reported in "Edinburgh Evening News" (2nd Dec).
Ratho—1 on 4th Dec (D. Cunningham), and 1 on 12th Dec (Miss J. U. Smith).
Kirknewton—1 from 17th to 19th Nov (Dr J. Young).

Edinburgh (Midlothian)

First reported at Hillend ("Edinburgh Evening News" 18th Nov), then 2 in Niddrie Road ("E.E. News" 2nd Dec). Subsequently 5 in Barnton on 9th Dec (Miss K. Bews), 3 in Greenhill Park, Morningside, on 30th (H. A. Maxwell), single birds in Swanston Avenue on 11th Jan (H. A. Ford), and Stirling Road, Trinity, on 14th (C. Waterston), 3 in Arden Street during the first week of February (per K. S. Macgregor), single birds in Suffolk Road from 10th to 12th Feb (Mrs Ewing), and Mortonhall Road on 14th (Mrs I. Brotherston), and 4 in Inverleith Terrace on 21st and 22nd (Miss J. M. Fraser). It will be seen that there are more late records from Edinburgh than from other places.

East Lothian

North Berwick—1 on 28th Nov (Mrs M. Meyer).
Gullane—4 in the usual garden on 9th Nov (Miss O. T. Thompson), 4 on 10th Dec, 7 on 14th, and 8 on 17th (W. K. Birrell), and about 40 reported on nearby Muirfield Golf Course early in Dec (per W.K.B.). Finally 1 in the accustomed garden from 4th to 6th April (O.T.T.).
Aberlady—small flock on 19th Dec (per W. K. Birrell).
Tranent—reported in "Edinburgh Evening News" (18th Dec).
Ormiston—reported in "Edinburgh Evening News" (2nd Dec).

Berwick

Cockburnspath—1 on 2nd January (W. G. Macmillan).

TWEED

Berwick

Burnmouth—7 arrived on 7th Nov, increasing to 10 on 9th and 10th (Mrs J. B. M. Graham).
Eyemouth—6 on 19th Nov (per Lt-Col. W. M. Logan-Home).
Coldingham—4 at Silverwells on 19th Nov (per Lt-Col. W. M. Logan-Home), and 3 at Coldingham on 3rd Dec (S. J. Clarke)
Manderston, Duns—25 stayed for half an hour on 15th Nov (S. J. Clarke).

Selkirk

Galashiels—2 on 16th Jan (Mrs A. B. Murray).
Selkirk—1 on 30th Nov, but others evidently there earlier in the month (A. J. Smith).
Yarrow Feus—1 on 25th Dec (J. Ballantyne).

Peebles

Walkerburn—4 on 24th and 25th Dec (J. Ballantyne).
Broughton—2 on 14th Nov (Mrs M. Howitt).

Roxburgh

At least 10 in mid-Nov ("British Birds" 54:442).

OUTER HEBRIDES

Harris

A single bird—no details (per W. A. J. Cunningham, 21st Nov).

St Kilda

A single bird—the first record—on 14th Nov (P. J. Fullagar).

NORTH-WEST HIGHLANDS

One at Ullapool, Ross, on 4th Dec (W. S. Caie).

ARGYLL

A "bevy" at Barcaldine, Argyll, on 29th Oct (Miss M. Davidson).

CLYDE

One at Old Kilpatrick, Dunbarton, on 11th Jan (Mrs J. Brooks).
Three in town of Ayr on 3rd Mar (R. M. Ramage).

SOLWAY

Dumfries

Lockerbie—2 on 14th Nov, and one found dead on 16th (R. T. Smith).
Unconfirmed rumours of birds at Thornhill and Moffat about this time.

Kirkcudbright

Dundeugh (near Carsphairn)—6 from 11th to 18th Nov (A. D. Watson).
Castle Douglas—1 on 24th Nov (Rev. M. D. Walker).

THE STORNOWAY WOODS

W. A. J. CUNNINGHAM

Once upon a time, it is said, the Island of Lewis was covered with trees. The rolling hills and flat moorland of what is now known in Gaelic as the Isle of Heather were once clothed with hazel and oak, alder, birch and ash. "Once upon a time" was perhaps 7,000 years ago, for then came climatic changes which encouraged the growth of the present prevailing blanket of peat and encompassed the destruction of tree and shrub. Residual pockets of woodland were probably wiped out by gales, being now deprived of natural shelter, and by fire at the hand of Viking to facilitate the subjugation of the Island about 1000 A.D.

For the next 800 years or so the surviving trees and shrubs would have been found only on islets in loch and sea where they were protected from fire and, the modern scourge, sheep. In many parts of the island these isolated pockets are now the only trees to be seen, in their season verdant oases in which flourish flowers and bird-life little seen elsewhere.

About 1850, however, a Mr James Sutherland Matheson, having amassed a considerable fortune as a merchant in the

Far East, purchased the Island of Lewis and commenced planting the grounds surrounding the castle he was building close by Stornoway. Soil had to be imported from the mainland to supplement the exiguous layer of peat overlying the rocky declivities and rounded hills of most of the area. In the course of time and with considerable foresight and planning a magnificent collection of native and exotic trees and shrubs grew up around the castle, so distributed that no part of the woodlands seem ever without leaf or colour. Plantations of spruce, fir, cypress and pine, are interspersed with copper and common beech, wych and common elm, sycamore, ash, oak, and, indeed, most of the deciduous trees one would scarcely expect to find in the Outer Hebrides: everywhere, for example, one comes with surprise upon laburnum, whitebeam, plum and maple. In the former private gardens were planted berberis, azalea, fuschia and hybrid rhododendrons, *Tropaeolum speciosum* flinging its scarlet blossoms over the latter and *Gunnera marcata* filling up the damp corners. Skilfully contrived paths revealed all this wealth of vegetation to the best advantage.

Nowadays the castle and woods are the property of the people of Stornoway and, though not kept in their pristine formality and tidiness, are maintained as well as possible. A feature of the present policies is a luxuriant growth of *Rhododendron ponticum* whose impenetrable spread is scarcely made up for by its short but beautiful flowering season.

The Castle Grounds, as they are now known locally, embrace an area of about 1¼ square miles and include four main types of habitat as far as birds are concerned. These are (1) the woodlands themselves, (2) the parkland now used as a golf-course, (3) the two water-courses of the River Creed and the Bayhead Burn, and (4) the foreshore of Loch Stornoway, facing the town and consisting mainly of rock and mud.

Such a variety of vegetation as is found in the first habitat in so small a compass and in such an isolated position—the nearest woods comparable in size being 40 miles away eastwards across the Minch at Lochinver—must attract many different types of bird-life, especially as the island lies on one of the principal paths of migration.

In this connection, the present status of the smaller passerines gives food for thought, and one is inclined to the opinion that gradual colonization has taken place, either as part of a general northward spread or as a result of drift migration. The Chiffchaff and Whitethroat are slowly colonizing the Highlands of Scotland and have now reached at Stornoway the culmination of their north-westerly advance, while the Goldcrest and probably the Chaffinch were perhaps accidental visitors who, like the writer, arrived on the winds of chance and liked the place so much that they stayed for good! Willow Warblers arrive in considerable numbers about the middle of April and a single Sedge Warbler appears occasionally in May or June in the same group of trees and bushes before passing on to its breeding haunt elsewhere in Lewis. The writer has seen Garden Warblers only once—two in May 1955—but later sightings of this species and of Wood Warblers, although not confirmed, may nevertheless be credible in the light of what has already been written. A Blackcap was seen by S. L. B. Lee in November 1961. The first record of the Goldfinch in Lewis was in January and February 1958 when one was seen in Stornoway. In November 1961, however, a small party was seen in the Castle Grounds and again in the following month in Stornoway. Bramblings have also been seen from time to time in the winter, when flocks of Greenfinches frequent the area—a few pairs remaining to breed.

One will normally look in vain for tits here as elsewhere in the Grounds, though the place seems ideally suited for such birds. At least two Blue Tits were, however, seen in the woods, and another on the outskirts, in November 1961, and these probably remained for the winter, as three or four were watched in the rhododendron bushes near the castle on 28th March 1962. Only four days later, on 1st April, one (probably two) Great Tits were seen in the same spot, feeding with Blue Tits, and occasionally chasing them through the trees. These birds had been reported on 25th March by W. Matheson, and seem to be the first recorded in the Outer Hebrides. Instead of tits the needle-sharp piping of Goldcrests may be heard almost everywhere amongst the conifer plantations, for an extraordinary number of these tiny birds are native to the woods.

But the most numerous bird in the woods is without doubt the Rook, and the story of his occupation is worth repeating as it is given in *The Birds of Scotland* (Baxter & Rintoul, 1953). "Following the great westerly movement in October 1893, numbers of Rooks landed on the west side of Lewis and hundreds were found floating dead along the shore; the survivors found their way to the Castle Woods, in Stornoway, to a number estimated at 4000; they stayed there during the winter of 1893 and about 200 remained there during the next summer but did not breed. In 1895 they nested there for the first time, and in 1902 there were over 100 nests. When we visited that rookery in 1932 we found it a large one, we have never seen trees more packed with nests; the trees are small and stunted and the nests were crowded together, in some cases actually touching each other. By 1934 the rookery was extending and there were nests in the trees fringing the shore, and in 1945 the census showed 170 nests."

Nowadays, it is not thought possible to estimate, even approximately, the number of occupied nests in the two main rookeries. They tower like avian tenements in the tall conifers of Gallows Hill and spread in ribbon development through the tops of elm and beech below the castle. Groups of nests and single ones of pioneers are reaching out along the trees fronting the town and almost every group of trees in the town itself is steadily being colonized. The sky above the town is darkened on summer evenings as a stream of countless Rooks home from the fields beyond to their slums in the tree-tops.

In winter remarkable numbers of Ravens are to be seen on the wing over the woods. The writer has counted over 40 in the air at once. The odd pair has been found breeding but the remainder probably represent most of the island's population which has come to roost there.

Similarly, only an odd pair of Jackdaws nest in the castle itself, many more preferring the warmer chimneys of the town. It is not known whether more than one pair of Hooded Crows is resident though many are seen on the scrounge and, again, may be incomers from the neighbouring sea-cliffs and moorland. So far, that other dark intruder, the Carrion Crow, has not found his way to the island.

The Cuckoo is a regular summer visitor to the whole of the Outer Hebrides, where it is a common sight and sound on the moor, and is also frequently to be seen and heard in the woods. A part of the Castle Grounds is, in fact, called *Buaile na Chuthaig* (Cuckoo Park). One May morning at 3.35 a.m., when the writer was living in a bachelor flat overlooking the woods, he counted an unbroken series of 182 calls, a feat which he, perhaps unwisely, divulged to the local press. At his wedding the following July he was not surprised to receive a telegram allegedly from *A' Chuthaig* (The Cuckoo) saying, *Meal bhur naigheachd; an duil an cluinn thu nochd mi*! which, being translated, means "Congratulations; do you think you will hear me to-night!"

In 1961 a Buzzard's nest was reported by a gamekeeper's son, and it is believed that other hawks or falcons may nest though proof is not available. Golfers on what used to be the parkland are often diverted by the sight of a Buzzard on the hunt or a glimpse of a Peregrine or Merlin in pursuit of a hapless victim.

The writer has so far been disappointed in his search for an owl in the woods though he is inclined to agree with the Misses Baxter and Rintoul that the Tawny Owl almost certainly nests in the more inaccessible parts of the woods. At least one Long-eared Owl has been seen in the island, furth of the woods, and the Short-eared Owl is to be found on the remoter moors but there are no records for the Castle Grounds.

The two main water-courses through the Grounds are roughly similar, differing only in size, and somewhat the same pattern of bird-life is seen in each. Grey Wagtails frequent both streams but have been proved to breed on the smaller only, the Bayhead Burn, where two pairs were seen with young in 1961. A young *alba* Wagtail was recorded in the same year in the same place, but the Pied Wagtail is much rarer than the Grey, while the White Wagtail is to be seen only on migration. Spotted Flycatchers have brought up families close to the banks of both the River Creed and the Bayhead Burn and there is at least one pair of Dippers to each stream, their cheerful song enlivening a winter's afternoon when all else is silent save for the rush of wind and water. Treecreepers have occurred occasionally during the winter and early spring in different parts of the woods adjacent to the castle but principally in a certain group of trees hard by the Bayhead Burn. Not until 1961 was a pair seen in the summer, and in May 1962 a pair nested in a painfully obvious hole, four feet from the ground in a small tree, but the nest was robbed and destroyed just as the eggs were on the point of hatching. This is the first breeding record for the species in the Outer Hebrides.

In February 1956 two immature Moorhens occupied the lower reaches of the Bayhead Burn but were not seen thereafter, occasional sightings in the following years of single birds being the only recurrence of this species.

Spring and autumn bring their quota of Swallows and House Martins, filling the air above the flowing waters for a few days each season. As a result probably of exceptionally severe gales they occurred in September 1961 in such unprecedented numbers that reports of sightings came from the most unlikely sources amongst the townsfolk.

The first recorded Collared Dove in the Outer Hebrides was encountered on the fringes of the woods near the head of the Burn in 1960 and at least two were seen and heard in May 1962. This seems to be the westernmost occurrence of this rapidly spreading species. The only other member of the Columbidae in residence is the prolific Woodpigeon, although Rock Doves from the neighbouring sea caves may occasionally be seen.

Generally speaking, the Castle Grounds are a natural haven to all birds seeking cover and rest in an otherwise barren landscape and are, as a result, full of interest when birds are on the move. When strong winds blow from the east Scandinavian visitors reach the islands in strength, but are usually picked up dead unless they happen to find these woods where they can rest and feed in sheltered surroundings. Waxwings feed hungrily in the town, and probably also in the Castle Grounds, on an abundance of berries, mostly cotoneaster and berberis, and Crossbills fill the tree-tops, showering passers-by with empty fir cones, while Redwing and Fieldfare chatter nearby. In a day or two, however, they are gone. From November through the winter one may be lucky enough to flush a solitary Woodcock from the rhododendron thickets and a Jack Snipe from the bogs and rushes near the Creed.

Again, a walk along the foreshore is often interrupted by the clacking of a Song Thrush at work on his anvil as he smashes the shells of common periwinkle and dog whelk, and almost every suitable stone bordering the path is surrounded by a litter of broken shells.

The Iceland Gull has been a regular winter visitor to the harbour area ever since the writer started keeping records in 1951. Between November and March there seem always to be at least one or two immature birds about and at times these may be seen on the tidal waters of the Bayhead Burn. Only rarely have pure white birds been seen, and never yet a fully adult one. Glaucous Gulls also occur from time to time during the same period, but not so frequently, and none has so far been noted within the limits of the Castle Grounds.

Heron, Turnstone, Purple and Common Sandpipers, Redshank, Oystercatcher, as well as many other of the wader tribe, frequent the muddy and rocky shore, while a variety of sea-birds can be seen fishing in the sea loch, including, principally, Red-breasted Merganser, Black and Common Guillemots (the former, oddly, being the commoner), Shag, and even the occasional Little Grebe and Great Northern Diver.

With such a wealth of bird-life under their very eyes, the people of Stornoway should indeed be grateful to the planter of these gracious woods and to the Providence which directed the fruits of the East to benefit so wisely a little part of the West.

"Iram indeed is gone with all its Rose,
And Jamshyd's Seven-ring'd Cup where no one knows;
But still the Vine her ancient Ruby yields,
And still a Garden by the Water blows."

CHECK-LIST

This list covers birds noted in the Castle Grounds, bounded by the statutory boundaries on the landward side and by the low water mark on the foreshore. This is a more restricted area than is covered in the article, and excludes sea-birds which may be seen from the shore, but outside the area on the sea loch and in the harbour. With a few exceptions it is a personal list, and it does not pretend to be complete. Amendments and additions would be welcomed. Many other species, such as Rock Pipit, Waxwing and Linnet, are to be found in and around Stornoway, and may occur, so far unseen by me, in the Castle Grounds. Unless otherwise stated, the term "resident" means also that the species breeds within the Castle Grounds.

Heron. Common, not proved to breed.
Teal. Occasional visitor.
Buzzard. Resident.
Peregrine. Occasional visitor, not proved to breed.
Merlin. Occasional visitor, not proved to breed.
Kestrel. Occasional visitor, not proved to breed.
Water Rail. Rare vagrant; one found dead on 4th March 1962.
Corncrake. Summer visitor, probably breeds.
Moorhen. Vagrant.
Oystercatcher. Common visitor.
Lapwing. Summer visitor, probably breeds.
Golden Plover. Summer visitor, not proved to breed.
Turnstone. Occasional visitor.
Snipe. Resident, probably breeds.
Jack Snipe. Winter visitor.
Woodcock. Winter visitor.
Curlew. Spring and autumn passage migrant.
Common Sandpiper. Occasional visitor, may breed.
Redshank. Common visitor.
Greenshank. Occasional visitor.
Greater Black-backed Gull. Common visitor, does not breed.
Lesser Black-backed Gull. Summer visitor, does not breed.
Herring Gull. Very common visitor.
Common Gull. Occasional visitor.
Iceland Gull. Regular winter visitor.
Black-headed Gull. Common visitor, not known to breed.
Rock Dove. Common visitor, does not breed.
Woodpigeon. Resident.
Collared Dove. Rare visitor since 1960, breeding not proved.
Cuckoo. Summer visitor, breeds.
Tawny Owl. See text; one noted by Dr E. V. Baxter on 5th April 1934.
Skylark. Resident.
Swallow. Spring and autumn passage migrant.
House Martin. Spring and autumn passage migrant.
Raven. Resident and common winter visitor.
Hooded Crow. Common visitor, not known to breed.
Rook. Very common resident.
Jackdaw. Resident.
Great Tit. First recorded on 25th March 1962.
Blue Tit. Rare visitor.
Treecreeper. Resident, bred 1962.
Wren. Resident.
Dipper. Resident.
Mistle Thrush. Resident.
Fieldfare. Winter visitor.
Song Thrush. Resident.
Redwing. Winter visitor.
Blackbird. Resident.
Whinchat. Summer visitor, not proved to breed.
Robin. Resident.
Sedge Warbler. Summer visitor, not proved to breed.
Blackcap. Vagrant; one on 7th November 1961.
Garden Warbler. Vagrant; two in May 1955.
Whitethroat. Summer visitor, not proved to breed.
Willow Warbler. Summer visitor, breeds.
Chiffchaff. Summer visitor, breeds.
Goldcrest. Resident.
Spotted Flycatcher. Summer visitor, breeds.
Hedge Sparrow. Resident.

Meadow Pipit. Resident.
Pied Wagtail. Spring and autumn passage migrant; rare summer visitor, breeds.
White Wagtail. Spring and autumn passage migrant.
Grey Wagtail Summer visitor, breeds.
Starling. Resident.
Greenfinch. Resident.
Goldfinch. Winter visitor.
Crossbill. Winter visitor.
Chaffinch. Resident.
Brambling Winter visitor
House Sparrow. Resident
Tree Sparrow. First noted in May 1962, possibly breeding.

SHORT NOTES

RED-LEGGED PARTRIDGES IN PERTHSHIRE

On 28th October 1961 Mrs E. J. Lines and D. Stark, on an excursion from the S.O.C. Conference to Blair Drummond, observed a covey of 17 partridges for some time. They were not convinced that the birds were common Partridges *P. perdix,* and noted a badger-like appearance about the head. I went with them and Dr and Mrs K. C. R. Halliday, Miss J. McFarlane and Miss Rogerson, and we found the birds in the same large partly-ploughed stubble field, and were able to observe them at ranges down to about 30 yards. The white eyestripe was seen by everyone, and red legs and bill were also noted. There was no horseshoe mark on the breast, and the white gorget was outlined in black. The barred lavender-coloured flanks were also seen. The birds were moving uphill into a wood and we watched them running about there and giving the typical *"chuck chuck-er"* call which, combined with the other features, confirmed that they were Red-legged Partridges *Alectoris rufa.*

I learned from Sir John Muir that the only introduction of these birds known to him was at his mother's estate, Braco Castle, in 1960, when eggs were hatched and the chicks released. Braco Castle is about nine miles NE of Blair Drummond and the ground between is heavily shot over.

B. E. WELD.

(These must be regarded as introduced birds. There are no records of Red-legged Partridges, other than introduced birds, in Scotland, and the species has apparently never succeeded in establishing itself where it has been introduced.—ED.).

ICELAND FALCON IN MIDLOTHIAN

On 15th November 1961 I arrived at the "car-park" at Fala Moor. On the short heather at the back of the Pond was a bird coloured like an immature Common or Herring Gull above and with a white or near-white breast starting high up on the body. There were no special head markings, the head blending in with the body plumage. The size seemed to lie somewhere between Common and Herring Gull.

The bird was clearly a falcon, but the colour was wrong for a Peregrine and the position was horizontal or crouching and not erect. The tail and folded wings projected well astern and I could not make out where the wings finished and the tail alone began. When the bird swivelled round, the almost pure white breast contrasted with the light grey-brown upper-parts. The lower breast was not really visible because of the horizontal position as it stood in the heather—appearing almost to lie in it—but it did seem as if the lower breast was beginning to be darker than the upper.

I turned my attention to the duck on the Pond, meaning to come back to this bird in a few moments, but shortly afterwards I realised that a large falcon was flying out from the back of the Pond towards the East. It flew almost like a Peregrine but was fully bigger than the biggest female Peregrine I have ever seen. The flight seemed more powerful and less winnowing than that of the Peregrine and the wings seemed relatively broader and less pointed. The wings had a light grey and almost white scaly or tesselated effect—like a slate roof with light and slightly darker slates seen in good sunshine—and this had the effect of paling the whole, making the darker slates light grey and making the lighter slates appear translucent or almost white.

At the time I thought the bird had probably been crouching on some prey, but when I was able to examine the spot three days later there was no sign of a kill. On the 16th I examined the skins at the Royal Scottish Museum and there was one skin of a male Iceland Falcon which I consider very closely resembled the bird I had seen at Fala the previous day.

William Brotherston.

PINK-COLOURED BLACK-HEADED GULLS

On 1st January 1962, while looking at a flock of about 30 Black-headed Gulls standing on a snow covered field near Newburgh, Aberdeenshire, I noticed that one had its head, back and breast suffused with a pale rosy pink colour. It was snowing at the time and the pink colour was very noticeable against the white background. I realise that of all possible dates 1st January is not the one on which to see pink gulls. *The Handbook* mentions that some pink suffusion occurs at times, but more often in summer than in winter. I was unable to

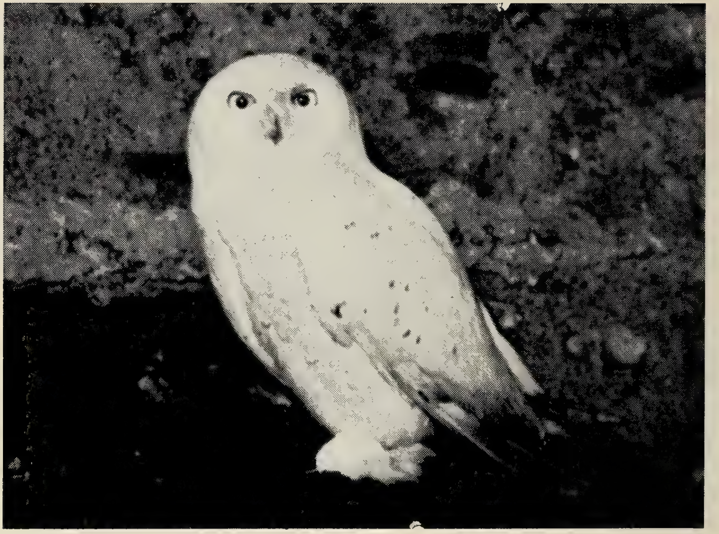

PLATE 6. SNOWY OWL captured in Aberdeenshire about December 1952 (see page 99).

make it into a Ross's Gull. A few days later, with Douglas Willis, I saw another pink Black-headed Gull, but this time in flight.

E. A. Garden.

SNOWY OWLS IN ANGUS, ABERDEENSHIRE AND BANFFSHIRE

In July 1961 a holiday-maker saw a large white bird hunting over the lower slopes of Craig Soales, Glen Esk, Angus, and this bird was later noted by shooting parties in August as a "white Buzzard." It was caught by the head-keeper and subsequently sent to the Edinburgh Zoo. I heard about this bird second-hand and was told it was a Snowy Owl.

Sim in *A Vertebrate Fauna of Dee* (1903) records only four Snowy Owls between 1824 and 1903, and it may therefore be of interest to note some other recent occurrences that I have heard of second-hand. A. Watson Sr., an experienced observer who watched a Snowy Owl on the Cairngorm plateau in 1952, saw another at the summit of the road at Corse Maul between Dufftown and Huntly in Banffshire on 7th January 1953. In February or March 1958 Dr W. Dally with D. Miles watched a large white owl from their land-rover near Cornescorn, Glen Esk. It was sitting on a fence and Dr Dally records that it was a large bird about the size of a Buzzard with quite a lot of black on it. They watched the bird for some minutes until it "spread its wings and flapped them at us" before flying away. Dr A. Watson Jr. has questioned Dr Dally independently and agrees that this is a reliable record, and in fact quite a good description of a first-winter bird. Dr Dally has practised in the Angus glens for several years and is familiar with Short-eared and other common owls. On some date between 1953 and 1955 a cock Snowy Owl was photographed alive at Culterty House, Newburgh, Aberdeenshire and this photograph was published in the press. Dr Watson is satisfied that this is a reliable record though I have no details. There are three additional published records from the Dee area recently, of one bird on the Cairngorm plateau in each of the two summers 1952 and 1953, but apparently not in between (*Scot. Nat.* 64: 176, 65: 129 and 69: 57), which may refer to the same bird, and of another on the Cairn O' Mount, Kincardineshire, on 3rd March 1960 (*Scot. Birds* 1: 238, *Brit. Birds* 54: 188). Thus during the last nine years there have been some five or six Snowy Owls reported in an area corresponding roughly to that in which Sim recorded only four in 79 years. There have been more observers recently but, even so, a number of these observations have only come to light fortuitously.

David Jenkins.

(On receipt of Dr Jenkins' notes we made extensive enquiries about these various records.

G. D. Fisher, Director-Secretary of The Royal Zoological Society of Scotland, confirmed the identity of the 1961 bird and suggested that it was probably an immature female though its age was not known with certainty. It was captured on 18th October in a rather tired condition and sent to the Zoo. It died on 8th January 1962, and the post mortem finding was that it died of pneumonia and nephritis.

Adam Watson Sr. describes the bird which he saw on 7th January 1953 as being little if at all different in plumage from the one which he had seen in the Cairngorms the previous summer. There is a possibility that it was the same bird. At the time he assumed that it was the same Snowy Owl which he had recently heard had been caught in the Cabrach area and taken to the late Dr Edgar Smith at Culterty, Newburgh. A photograph of the bird had appeared in the local press.

After considerable amateur detective work by several people a copy of this photograph was eventually traced to Miss E. A. Garden's photograph album. It is reproduced in this issue of *Scottish Birds*. Miss Garden writes that a farmer in the Cabrach area, near Rhynie, Aberdeenshire, was puzzled as to why every rabbit in his snares had its head removed, until he came on the Snowy Owl in a snare, caught by its foot but otherwise unhurt. He took the bird home and got in touch with Charles Cockburn of Aberdeen who took it to Dr Smith at Culterty. There it was kept in a dirty little shed for a week (hence the dark primaries in the photograph) before being ringed and released. It was a magnificent bird, despite its miserable surroundings, with striking large golden eyes. Dr G. Swapp took a ciné film of it being released, and this was the last that was seen of it.

We rather admire people who simply pick up huge birds of prey and carry them home with them, as seems to have been the ignominious fate of two of these birds.

Dr W. Dally has sent us details of his bird—it was seen on 22nd February 1958.

It is at least possible that the Snowy Owls seen in the Cairngorms during the summers of 1952 and 1953, the one captured on the Cabrach about December 1952, and the one seen at Corse Maul in January 1953, were all the same bird—an adult male. On this reckoning the score would be reduced to a minimum of four birds in the area in recent years.—Ed.).

RED-THROATED PIPIT AT ST KILDA

At 1500 hours on 7th October 1961 my attention was drawn to an apparently largish dark pipit, very heavily streaked below and with a faintly pink throat. It alighted on a stone just above the boulder beach of Village Bay, St Kilda, but soon flew uttering a characteristic call-note I had not heard before and quite distinct from the calls of Meadow, Tree and Rock Pipits—it was a low buzz '*psssss*' uttered singly. For the next 45 minutes I followed the pipit as it moved round in a party of Meadow Pipits. Though at first sight it had looked a large pipit, alongside the Meadow Pipits it was virtually the same size. It was easily distinguished from them at rest by its darker and more streaked back, completely lacking any brown or greenish colouration, and by the much heavier and very numerous wide black streaks below. The pinkish throat was not conspicuous but a lot depended on the angle of the light. The legs were a light flesh colour. When flushed the bird usually called, and in flight it looked darker and the white outer tail feathers whiter (probably by contrast) than in the Meadow Pipit. Once I noted the streaks of the back extending onto the rump as it flew up, but this was difficult to see clearly.

The bird remained until 10th October, and subsequent views confirmed all these points. It always perched on the ground and inhabited the wetter areas of mixed grassland. Usually it was to be seen in company with a few Meadow Pipits. I am satisfied that it was a Red-throated Pipit.

W. E. WATERS.

(This record has been accepted by the Rarity Records Committee of *British Birds*. Red-throated Pipits have previously been recorded at St Kilda on 21st Septmber 1910 and 8th October 1911 (WILLIAMSON, K. & BOYD, J.M. 1960. *St Kilda Summer* p. 206.).—ED.).

FOOD OF PIED WAGTAIL

At about 2000 hours B.S.T. on 20th May 1961 Patrick Banks, Kenneth Williamson and I were driving south between Callander and Doune, Perthshire, when we saw a male Pied Wagtail killed by a car in front of us as it was trying to fly across the road to its nest in the stone breastwork. We picked it up with the contents of its bill intact, and these were subsequently identified at the Hope Department, University of Oxford, as follows:—

Diptera: *Hilara* sp. male. Family Empididae.
Platychirus sp. male. Family Syrphidae.
Syrphus sp. (wing only). Family Syrphidae.
? sp. (wing only). Family Muscidae; sub-family Anthomyiinae.

Lepidoptera: Larva ?sp. ?Family Noctuidae.
Epirrhoe tristata (L.). Family Hydriomenidae.

Ephemeroptera: Wing of unidentified May-fly.

E. tristata, the Small Argent and Sable, is a common Scottish moth which begins to fly in late May.

The nest of the wagtail contained five young, about five days old, and an unhatched egg. The female settled on the road close to the male after he had fallen; we could only hope she would continue to feed the brood.

BRUCE CAMPBELL.

UNSEASONABLE BREEDING OF HOUSE SPARROWS

Following a report I visited a farm at Auldgirth, Dumfriesshire, and confirmed that some five pairs of House Sparrows had entered and attempted to breed in a heated turkey house in the middle of November 1961. Most of the time they seemed quite content to feed and drink inside, along with the turkeys, although they carried nesting material from outside. The first nests were destroyed because the birds were spoiling the turkeys' food. The sparrows then rebuilt, and were sitting on eggs by Christmas, when the houses were cleaned out and the nests unfortunately destroyed. It seems that the constant heat and plentiful food supply stimulated the birds to breed out of season.

J. G. YOUNG.

CURRENT NOTES

(**Key to initials of observers :** A. F. Airey, D. G. Andrew, J. Ballantyne, Miss P. G. Baxter, H. Boase, W. G. Breed, E. Dicerbo, J. Dicerbo (J.Di.), G. Dick, Dr D. Dickson, J. Donnan (J.Do.), I. R. Downhill, Dr W. J. Eggeling, Miss E. A. Garden, M. Hamilton, R. Hillcoat, Lt.-Col. W. M. Logan Home, J. Hoy, Dr D. Jenkins, Mrs I. M. Kerr, M. Larkin, G. Lipscomb, R. McBeath, A. Macdonald, A. T. Macmillan, D. Manson, Prof. M. F. M. Meiklejohn, Mr & Mrs J. Melrose, T. D. H. Merrie, Rev. R. I. Mitchell, Col. G. Murray, T. Paterson, J. Potter, R. M. Ramage, D. Skilling, P. J. B. Slater, G. G. J. Smart, R. T. Smith, Dr T. C. Smout, Dr R. S. Weir. T. Weir, B. E. Weld, D. R. Wise, J. Young.

Unless otherwise stated, January/April dates refer to 1962 and all others to 1961).

Hitherto we have usually attempted to classify notes in this section under headings such as "Distribution," "Autumn Migration" and "Winter Visitors." In practice this is very difficult to achieve, and leads to varying treatment of similar records in different issues of the journal, making it more troublesome than it need be to look up records which you vaguely recall. You have only to consider an example to see the snags: where would you put a record of a bird, recorded for the first time in a particular area, first seen on autumn migration on a date when others were recorded in other parts of Scotland, and subsequently found, unexpectedly, to be wintering? Should the record appear in three different places? After trying to devise ways round this we have decided that the best solution is to lump all these records together under one heading. Current Notes are very largely concerned with the question of the distribution of birds—whether breeding, migrating or wintering—and the only notes which we have picked out and given separately are the few general observations on such subjects as behaviour and plumage, and observations which do not relate to the current period. In this issue this means that notes dealing with the autumn migration of 1961, and all earlier observations, have been given separately.

No notes on the arrival of summer visitors in 1962 have been included. These will be used in the next issue of *Scottish Birds,* when we have a representative selection of arrival dates. It is, however, already quite clear that the early migrants, such as Sand Martin and Wheatear, were very late this year. Any observations on this subject will be welcomed, especially if they can be related to similar observations in normal years.

Distribution

On 20th February between Gigha and the pier in West Loch Tarbert a **Black-throated Diver,** 38 **Great Northern Divers** and six **Red-throated Divers** were counted, all fishing in one single party (M.F.M.M., T.W.).

A **Red-necked Grebe** at Gosford and three at Aberlady were seen on 4th March (I.R.D., P.J.B.S.), and there was one at Lundin Links on the 10th (P.G.B., R.S.W.). At least 15 **Slavonian Grebes** were seen in West Loch Tarbert, Argyll, on 17th February. That these were probably sheltering from the storm of the previous day is suggested by the fact that on the 20th, with a flat calm, only a single pair was observed (M.F.M.M., T.W.).

A **Fulmar** was found shot, in the upper Forth estuary at Skinflats, Stirlingshire, on 1st April (B.E.W.). A **Cormorant** at St Mary's Loch, Selkirkshire, on 18th February was the first the observer had seen on any of the border lochs in that area (J.B.).

A pair of **Gadwall** was present on the Hightae and Mill Lochs at Lochmaben, Dumfries-shire, from 18th February to 11th March (D.S., R.T.S.). An indication of the large numbers of **Pintail** in the upper parts of the Forth estuary is given by a count of 480 in the bay north of Grangemouth on 18th February (G.D., J.P.). A female was seen at Cramond on 17th February, but although this was the only one seen on frequent visits during the winter months it seems likely that odd ones will occur there from time to time as they do at Aberlady and Tyninghame (T.C.S.).

In Edinburgh the female **Goosander** seen at Dunsappie on 2nd March (*antea* 2: 46) was at St Margaret's Loch two days later, and at Duddingston on the 14th (D.G.A.). Single drake **Smew** have been noted at Loch Fitty, Kingseat, Fife, on 17th December with Tufted Duck and Pochard (G.D., J.P.), at the mouth of the Endrick, Loch Lomond, on 11th March (T.D.H.M.), and at Peppermill Dam, Fife, on 20th March (J.P.). Two **Shelduck** were at Gartmorn Dam, Clackmannanshire, on 18th March (T.P.).

A **White-fronted Goose** was in a stubble field near Gladhouse, Midlothian, with a small party of Grey Lag Geese on 1st April (D.G.A.). Small parties of **Barnacle Geese** were seen on two islands off Jura and one at the mouth of West Loch Tarbert on 20th February (M.F.M.M.). There were five with Pink-footed Geese near Pathhead, Midlothian, on 17th April (A.M.).

Notes of **Whooper Swans** in fields refer to 88 in a potato field a mile east of Drum, Crook of Devon, Kinross-shire, on 24th February (H.B.), and to 14 sitting and walking about in grass fields five miles west of Kelso by the Hawick road on 9th April (W.M.L.H.). Larger flocks than already recorded (*antea* 2: 48) are reported from the upper part of the Forth estuary. A count of the population on the Forth between the Kincardine Bridge and Cambus and on Gartmorn Dam gave a total of 347 on 11th March, and a week later there were 273 on Gartmorn alone (T.P.). Last winter an immature Whooper Swan spent some months on the Tweed below Walkerburn (*antea* 1: 433), and this winter an adult was seen there on 14th April. It was with two 1st winter Mute Swans and quite tame. It seems likely that it was the same bird (J.B.). Two adult and one immature **Bewick's Swans** were first seen at Gartmorn Dam, Clackmannanshire, on 17th March and all stayed until at least the 24th (G.D., A.T.M., T.P., J.P.). Three were at Libberton, Lanarkshire, on 27th January (see *antea* 2: 48) (M.L.).

A **Peregrine** was soaring over University Avenue, Glasgow, on 5th March (M.L.).

Snipe were noted as more numerous than usual this winter about Kingoodie, Perthshire (H.B.). A flock of over 1,000 **Curlew** was counted at Baldoon, Wigtown, on 13th February (A.F.A.). Single **Black-tailed Godwits** were seen at Cult Ness, Fife on 2nd and 12th February (G.D., J.P.), and there were three **Greenshanks** at Tyninghame on 28th January (J.B.). A **Ruff** was seen in a flooded field at Isle Steps, near Dumfries, on 14th January. This is an uncommon bird in the Solway area at any time, and the only one seen last autumn was at Caerlaverock on 14th October 1961. The latest Ruff previously recorded was on 4th November 1956 when I. F. Stewart saw one locally (J.Do., D.M., J.M., R.T.S.).

Immature **Glaucous Gulls** are reported at Longannet, Fife, where one was seen, apparently in its last immature year, on 4th November (G.D., J.P.), and at the sewage outflow at Oban on 23rd March (M.L.). On 9th April an adult **Iceland Gull** followed the M.S. Dunera with other gulls as it made up the Clyde past Wemyss Bay. It was there again in much the same place on the 11th and followed the ship well past Bute (W.J.E.).

On 1st March an exhausted **Kittiwake** was found well inland at Moffat, Dumfries-shire. It was offered sliced fish but refused to eat and died two hours later (E.D.). This marine species is occasionally blown inland, and *The Birds of Scotland* gives several such records, including one for Dumfries-shire.

Great numbers of **Woodpigeons** were moving in the East Neuk of Fife on 30th December, a day of intense cold and north wind. Flocks of 200/300 began to pass eastwards on a broad front over Largo, Kilconquhar, Elie, and further east, from about 10.30 a.m. For about an hour they went on almost without a break and there must have been many thousands. After an interval the birds began returning westwards in the same endless stream, possibly having failed to find sufficient open ground in the East Neuk to sustain such numbers (R.I.M.). There has long been argument whether winter invasions of pigeons are immigrants from the continent. A very interesting paper on "The autumn movements of the Woodpigeon" has just been published by R. K. Murton and M. G. Ridpath (*Bird Study* 9: 7-41). The evidence suggests that winter flocks of pigeons can usually be explained by the appearance of juveniles from November and by the more concerted flights of adults out of their winter roosts in the morning. It may be, however, that the movement on 30th December was not in this category.

The **Kingfisher** is a sadly scarce bird in Scotland now. One was seen on 18th April on the Nith near Sanquhar, Dumfries-shire (R.M.B.).

There is strong evidence that **Shore Larks** wintered in Aberdeenshire on the Ythan estuary; they were seen in different places on 30th December (4 on the shore), 6th January (4 feeding in stubble with Skylarks), and 5th March (3 feeding along the high tide mark) (D.D., E.A.G., G.L.).

Further winter **Blackcaps** are reported (see *antea* 2: 53). Single cocks were in Angus during late December at Barnhill and Brechin, and a third bird at Kinnaber House, near Montrose, on the 27th (G.G.J.S. *per* H.B.). In Edinburgh a cock Blackcap came to feed from a scrap basket in a garden in Trinity on various dates from 23rd January to 28th February (I.M.K.).

A few **Great Grey Shrikes** have already been recorded (*antea* 2: 54). Another was seen near Crathes, but just in Aberdenshire, on 29th March (D.J.), and at Flanders Moss one was watched making sallies from a tree stump on 20th February (M.L.) and another, or perhaps the same bird, seen near Buchlyvie, Stirlingshire, on 8th and 10th April perching on fence posts beside the line of the old railway (T.D.H.M.).

A flock of over 100 **Siskins** was feeding in straw put out for cattle in pasture near Monreith, Wigtownshire, on 17th February (A.F.A.). Eleven **Twite** were at Rosyth Dockyard, Fife, on 8th February (G.D., J.P.).

The flock of **Snow Buntings** in a stubble field near St Mary's Loch (see *antea* 2: 56) had increased to 390 birds by 14th January, and the same day there were 120 in another stubble field at Ashkirk, Selkirkshire (J.B.).

Three **Tree Sparrows** were seen between Drybridge and Gatehead, Ayrshire, on 16th April. Though they have been seen in the area in recent years this is only the second time the observer has noted them in Ayrshire (R.M.R.). Small parties have been seen during the winter about Coatbridge and Airdrie, Lanarkshire, and single birds in various places there during the previous three summers (W.S.). The species is evidently fairly common in north Lanarkshire. In Dumfriesshire they "appear to have increased greatly in recent years" near Lockerbie, and have nested for several years in boxes put up for them, but a flock of 17 there on 11th March was the most yet seen together by the observer (R.T.S.). A flock of 60 Tree Sparrows, 40 Bramblings and a large number of other finches was at Ettrick Bridge End, Selkirkshire, on 14th January (J.B.), and over 150 Tree Sparrows were feeding in a field near Whitekirk, East Lothian, on 28th January. There were apparently as many more in a young wood on the other side of the road (M.H.).

Autumn 1961 and earlier notes

A drake **Scaup** was on Threapland, Morayshire, beside the Elgin to Fochabers road on 12th June. There was no sign of a duck (M.H.).

The first **Little Terns** to be recorded at Longannet were two on 14th and one on 28th July (J.H.).

A **Turtle Dove** was at Waterside Mains, Thornhill, Dumfries, from 23rd to 26th September (G.M., J.Y.).

Two immature **Cuckoos** were seen at Longannet—another first record—on 14th June (J.H.).

A late **House Martin** was at Aberdeen on 30th October (W.G.B.). A **Magpie** was seen near Bridgend after stormy weather in the winter of 1959/60—only the second occurrence on Islay (M.F.M.M.).

Twenty **Redwings** in the Botanic Gardens, Glasgow, on 10th October are earlier than those already noted (*antea* 1: 500, but see earlier dates in articles in this issue) (D.R.W.). A cock **Black Redstart**, described by the observer, was seen on 22nd October at the mouth of the Don, Aberdeen, at the edge of the sand dunes within 100 yards of the sea (W.G.B.).

General observations on behaviour, plumage, etc.

On 7th January a very pale **Pink-footed Goose** was seen near Caerlaverock. Its bill and legs were the normal colour, but its body, wings, neck and head were a very pale buffish white (J.Di., R.T.S.).

With reference to the apparently adult **Whooper Swan** with pink instead of yellow on the bill (*antea* 2: 56), a similar bird was with a herd of 17 adult Whooper Swans which was at Wigtown during December and January. The observer suggests that such birds which have failed to develop the adult bill colour may be in their second winter (A.F.A.).

An **Oystercatcher** with an almost pure white head was at Barnbougle, West Lothian, on 17th March (T.C.S.).

On 7th April the passengers on M.S. Dunera, anchored off Stornoway, had good views of an unusual gull among the throng of birds round the ship. At a distance it appeared to be pure white, but at close range a very faint brown shadowing could be seen on the wings, corresponding exactly to the black on a **Herring Gull's** wings. Though the mantle and wings appeared to be much more white than grey this may be the bird recorded previously as an albino Herring Gull on 18th February 1961 and 18th November (*antea* 2: 56) (W.J.E.).

In Glasgow the **Common Gull** is a persistent mobber of Kestrels—pursuing them closely with human-sounding screams, and very loathe to leave them alone. Once they were seen to mob a Peregrine, but this time, instead of taking turns to fly after the bird at close range, they remained grouped and flew around the Peregrine at a distance of about 100 feet at the same height as it. Lesser Black-backed Gulls show no interest in Kestrels (M.L.).

An adult male **Great Spotted Woodpecker** at Gargunnock, Stirlingshire, visited a window-sill from early January for several months to feed on oatmeal, bread, fat and cake crumbs. It fed like a tit, clinging to a lump of fat hanging on a string. It was not seen to attack any other birds (B.E.W.).

On 8th February in Inverleith Park, Edinburgh, about 100 **Redwings** flew up into the trees, and a large proportion of them sang—the warble or second part of the song only, but quite audible from at least 100 yards away. This presumably should be regarded as more than mere sub-song (M.H.).

At the Christmas and New Year weekends, with lots of snow and ice 3,600 feet up Cairngorm at the top of the new chair lift, some ten or twenty **Snow Buntings** were feeding in the lee of the building on crumbs dropped by skiers. This is an interesting adaptation to the changing scene on top of Scottish mountains in winter (R.H.).

At Ayton, Berwickshire, a yellow-cinnamon coloured **House Sparrow** was seen on 3rd April. From its behaviour it was probably a female. It had been seen several times earlier in the year, and the other House Sparrows treated it as if it was a normal bird (R.M.).

OBITUARY

DR VERNON D. VAN SOMEREN

The sudden death of Vernon van Someren at Jinja, Uganda, shortly before he was due to retire and return to Scotland, is a sad loss to ornithology. He graduated B.Sc. with first class honours in Zoology at Edinburgh University, and in his student days was an active member of the Midlothian Ornithological Club, taking part in establishing the Isle of May Bird Observatory in 1936. From 1929 to 1936 he contributed notes to the *Scottish Naturalist*, including, in 1936, a paper on "Territory and distributional variation in woodland birds" —a study of territorial behaviour in a wood on Mortonhall Estate near Edinburgh.

He won a post-graduate Carnegie Research Scholarship, and took his Ph.D. at London University in 1938. After the War he served as Salmon Research Officer with the North of Scotland Hydro-Electric Board, and latterly was Director of the East African Fishery Research Organisation in Uganda.

In 1958 his book *A Bird Watcher in Kenya* was published—a fitting memorial to an enthusiastic ornithologist and first-class bird photographer.

G. Waterston.

REVIEWS

Check-list of the Birds of Cley and Neighbouring Norfolk Parishes. By R. A. Richardson. Cley Bird Observatory, 1962. Pp. 36. 7/6d.

This admirable little book, compiled by a well-known bird artist, who is also one of the most accomplished identifiers of birds in the Kingdom, is a model of local ornithological work. Cley has for long been known as a place to rival the Isle of May or Fair Isle in the number of rare wanderers occurring there, and an account of the birds collected in "the bad old days" has already been published by the local taxidermist, H. N. Pashley (Witherby, 1922); here, by contrast, we have the point of view of the field identifier and the observatory trapper. It is interesting, however, to note that the majority of species on the area's list are not likely to be trapped at all, since 23 pages out of 36 are devoted to non-passerines!

The author has been cautious; he has omitted sight records of the Little Crake and has issued a warning about the possible escape of his Red-headed Buntings from captivity. (It would, incidentally, be helpful to know the sex of these, since far more males are imported than females). And, if the Red-headed Buntings are included at all, why omit the 1931 Flamingo which (seen by the present writer) showed no signs of tameness? Even the Demoiselle Crane at Wiveton in the 1920's could have been afforded a mention.

We disagree with Mr Richardson that the Nuthatch breeds in "very small numbers," having found it common inland wherever there is suitable woodland, nor can we believe that the two rookeries mentioned are the only ones in ten parishes!

And why, pray, should an account of a restricted English locality be reviewed in a Scottish journal? It is that Cley is no longer local, but national. Annually it is visited by more Scots wishing to see birds unknown at home, and several Scots are almost annual migrants there. To them especially this booklet will be of very great use on their periodic migrations.

M. F. M. Meiklejohn.

A List of 16 mm. Films on Natural History Subjects. Part I: The British Isles and Europe. By the Intelligence

Unit, Council for Nature, 41 Queen's Gate, London, S.W.7, 1962. Duplicated typescript. Pp. 28. 2/6d.

The Council for Nature has recently produced a most useful list of nature films available in the 16 mm. size used by all clubs and societies. This gathers into convenient form information otherwise scattered through endless film catalogues, many of which would not be readily available to club secretaries and others interested in knowing just what was available. Full details are given and the list should be invaluable to those planning to use films for either education or entertainment.

It is unfortunate, though perhaps inevitable, that no indication is given of the quality of the films listed. Many of these have been reviewed in such periodicals as *Film User*, but it is not likely that many users of nature films will take the trouble to hunt out old reviews of nature films when planning showings. This means that every entry in the list appears to carry the recommendation of the Council for Nature, even though it is specifically stated that no attempt has been made to view any of the films. Those with experience will draw their own conclusions from the names of the producers and the quality of, for instance, films by the British Transport Film Unit will recommend them as much as the fact that such films are loaned out free of charge. But it is, to say the least, a pity that in such a catalogue films produced by experts with the greatest scientific accuracy should merit the same type of entry as some of the older films of very poor quality. As an example, there is nothing to show that the old G.B. Film Library film on the Great Tit includes a shot of young birds sitting side by side on a branch, meant to have sentimental appeal but in fact showing half-fledged birds clearly removed from the nest and placed there, which, moreover, one by one fall off the perch. Such supposedly humorous incidents would only appear sad to the type of audience attracted by member bodies of the Council for Nature. By contrast, such films as Heinz Sielmann's masterpieces on woodpeckers and storks surely merit some label to indicate a quality which is in a completely different class. It would seem that the next service the Council for Nature should undertake for its members is a guide to its own catalogue. Perhaps this would not be so hard to achieve if the catalogue were to be accompanied by an appeal for criticisms from member societies on the films they see and use, so that a body of opinion could be built up and a system of recommendation, at any rate for all the better films, added to the next edition.

C. K. MYLNE.

REQUESTS FOR INFORMATION

Pink-footed Goose and Purple Sandpiper. The Norwegian Ornithological Spitsbergen Expedition 1962—N.O.S.E. for short (c/o Zoologisk laboratorium, Universitetet, Blindern, Oslo, Norway)—will ring these species in Spitsbergen this summer and would welcome details of any marked birds seen. Both species will have an aluminium ring on one leg and a coloured one on the other. Additionally the Purple Sandpipers will be dyed on the breast and sides, though this will disappear during the autumn.

Pied Flycatcher. Dr Bruce Campbell has been repeating the enquiry into the breeding distribution of the Pied Flycatcher which he first made in 1952 (*Bird Study* 1: 81). The marginal position of Scotland makes it particularly important to have up to date information, and anyone who can give details of present status and changes since 1952 is asked to write to Dr Campbell at Hordley, Woodstock, Oxfordshire. Questionnaires are available for those who like using them.

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

ANNUAL CONFERENCE

The fifteenth Annual Conference and twenty-fifth Annual General Meeting of the Club will be held in the Dunblane Hotel Hydro, Dunblane, Perthshire, from 26th to 28th October 1962. The Conference Programme will be printed in the next issue of "Scottish Birds," and this intimation is given in order that members may make their Hotel reservations in good time. All bookings, including those at the Hotel Hydro, should be made with the hotels and **not** with the Secretary.

Hotel Accommodation in Dunblane

DUNBLANE HOTEL HYDRO (Tel. 3161). Special Conference charge: Dinner and bed on Friday 26th; breakfast, lunch, Annual Dinner and bed on Saturday 27th; breakfast and lunch on Sunday 28th—£4, 15s 0d. A 10% gratuity charge will be added to all bills.

STIRLING ARMS HOTEL (Tel. 2156). Bed and breakfast from 22s 6d.

*THE NEUK PRIVATE HOTEL, Doune Road (Tel. 2150). Bed and breakfast from 17s 6d.

*SCHIEHALLION HOTEL, Doune Road (Tel. 3141). Bed and breakfast from 17s 6d.

BLAIRALAN, Dargie Terrace (Tel. 3196). Bed and breakfast from 18s 6d.

¶ARDLEIGHTON HOTEL (Tel. 2273). Bed and breakfast from 15s.

*These hotels are some distance from the Conference hotel.

¶Situated near the Hotel Hydro gates.

Hotel Accommodation in Bridge of Allan

ALLAN WATER HOTEL (Tel. Bridge of Allan 2293). Bed and breakfast from 30s.

ROYAL HOTEL (Tel. Bridge of Allan 2284). Bed and breakfast from 27s.

Members with cars who have difficulty in obtaining single rooms in Dunblane should find that the above two hotels in Bridge of Allan have ample single accommodation. The distance from Dunblane is about 3 miles.

The above terms for hotels other than the Conference hotel are quoted as a guide only, and prices should be confirmed.

The Conference registration fee will be 8s 6d. The cost of the Annual Dinner to members not staying in the Hotel Hydro will be 16s 6d .Owing to limited seating accommodation, the Council regrets that Members may invite only one guest each to the Annual Dinner. These items should be paid when you register at the Conference, and **not** now.

"SCOTTISH BIRDS," VOLUME 1.

Copies of the first issue of "Scottish Birds," Volume 1 No. 1 (Autumn 1958) are now unobtainable, while only a few copies of No. 2 (Winter 1958) and No. 5 (Autumn 1959) remain in the office. As overseas libraries subscribing to the journal are asking us for complete sets of back numbers for binding purposes, an urgent appeal is made to members who have these numbers and do not require them, to return them to the office. The full price (5s) will be repaid for each copy received.

CLUB OFFICE

During the summer it is proposed to recondition and furnish a room in the basement of the Scottish Centre for use as additional office and Library accommodation. If members have any spare furniture such as tables, chairs, cupboards, shelves, rugs, etc., which they do not require, the Secretary will be very glad to hear from them. Donations of furniture will be gratefully received, and purchase will be considered.

It will also be necessary for the Club to acquire a second typewriter. Members who may have one for disposal are asked to inform the Secretary.

CLUB LIBRARY

The Council wishes to thank most warmly those members who have, during the past year, donated new and old books and journals to the library, and also those who by purchasing books through the book agency have enabled us to use the profit to obtain scarce books. Recent acquisitions from the Library Fund include both the Old and New Statistical Accounts (1791 and 1845) in addition to other important reference books. Donations of books, and monetary gifts to the Library Fund, are invited and will be much appreciated.

EXCURSION TO THE FARNE ISLANDS

Will members please note that the date of the Edinburgh Branch excursion to the Farne Islands has been altered from Sunday, 1st July, as previously announced, to Sunday, 8th July. Members who have already applied have been informed of this change.

BIRD CONSERVATION

THE aim of bird conservation is to promote the richest and most varied bird-life possible. Man's commercial developments often threaten species which require highly specialised habitats ; we try to combat this by creating Reserves in such areas.

The Society has assisted with the re-establishment of "lost" indigenous species by creating the right conditions for them to recolonise their old haunts. This was achieved at Havergate by regulating the water-level by artificial means so that Avocets could breed ; and in the case of the Ospreys at Loch Garten by preventing human predation in the form of egg-collecting. Experiments are being carried out with nest-boxes for Golden-eye duck in the hope that we may induce this species to breed in Scotland.

A further example of a positive step in bird conservation was the elimination of rats on Fidra where they had decimated the tern colonies on this island. The Society successfully exterminated the rats, and the terns now breed successfully.

The Society was largely instrumental in persuading the Government to ban the use of aldrin, dieldrin, and heptachlor for dressing spring-sown grain, thus reducing the wide-spread damage to birds and wildlife caused by these toxic chemicals.

In 1961, the Society established Reserves at Horse Island (off Ardrossan) ; and at Inchmickery, Fidra, Lamb, and Eyebroughty in the Firth of Forth. In 1962, further Reserves will be declared.

All these activities cost money. As a bird-watcher we appeal to you to support the work of the Society by becoming a Member at an annual subscription of one guinea (10s if under 21 years of age). This subscription entitles you to copies of the Society's quarterly journal "Bird Notes."

Write now for copy of Prospectus.

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NOTICE TO CONTRIBUTORS

All contributions should be sent to Andrew T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Attention to the following points greatly simplifies production of the journal and is much appreciated.

1. Papers should if possible be typed with double spacing. All contributions should be on one side of the paper only.

2. Topical material for Current Notes should reach the Editors by the end of March, June, September and December. at which time they begin to compile this section. All other notes should be sent promptly but important items can be fitted in until a month or so after these dates.

3. Proofs will normally be sent to authors of papers, but not of shorter items. Such proofs should be returned without delay. If alterations are made at this stage it may be necessary to ask the author to bear the cost.

4. Authors of full-length papers who want copies for their own use MUST ASK FOR THESE when returning the proofs. If requested we will supply 25 free copies of the issue in which the paper is published. Reprints can be obtained but a charge will be made for these.

5. Particular care should be taken to avoid mistakes in lists of references and to lay them out in the following way, italics being indicated where appropriate by underlining.

EGGELING, W. J. 1960. *The Isle of May.* Edinburgh and London.
DICK, G. & POTTER, J. 1960. Goshawk in East Stirling. *Scot. Birds* 1:329.

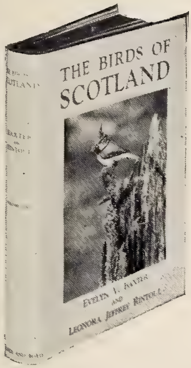
6. English names should follow *The Handbook of British Birds* with the alterations detailed in *British Birds* in January 1953 (46:2-3) and January 1956 (49:5). Initial capitals are used for names of species (*e.g.* Blue Tit, Long-tailed Tit) but not for group names (*e.g.* diving ducks, tits). Scientific names should be used sparingly (see editorial *Scottish Birds* 2:1-3) and follow the 1952 B.O.U. *Check-List of the Birds of Great Britain and Ireland* with the changes recommended in 1956 by the Taxonomic Sub-Committee (*Ibis* 98:158-68), and the 1957 decisions of the International Commission on Zoological Nomenclature (*Ibis* 99:369). When used with the English names they should follow them, underlined to indicate italics, and with no surrounding brackets.

7. Dates should normally be in the form "1st January 1962", with no commas round the year. Old fashioned conventions should be avoided—*e.g.* use Arabic numerals rather than Roman, and avoid unnecessary full stops after abbreviations such as "Dr" and "St".

8. Tables must be designed to fit into the page, preferably not sideways, and be self-explanatory.

9. Headings and sub-headings should not be underlined as this may lead the printer to use the wrong type.

10. Illustrations of any kind are welcomed. Drawings and figures should be up to twice the size they will finally appear, and on separate sheets from the text. They should be in Indian ink on good quality paper, with neat lettering by a skilled draughtsman. Photographs should either have a Scottish interest or illustrate contributions. They should be sharp and clear, with good contrast, and preferably large glossy prints.



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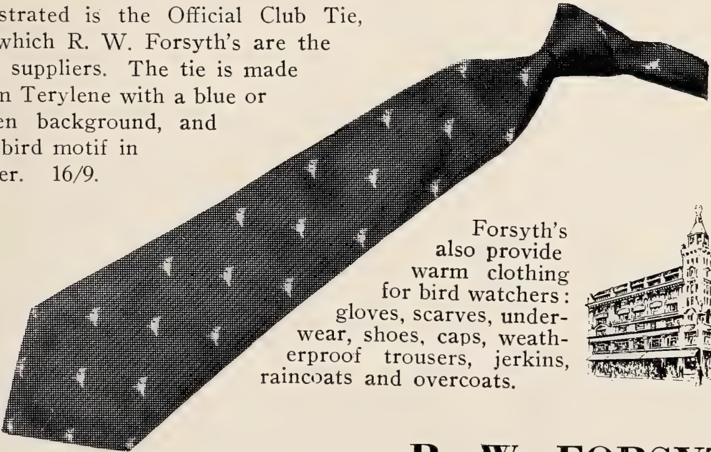

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SCOTTISH BIRDS

The Journal of The Scottish Ornithologists' Club

Vol. 2 No. 3 *Autumn 1962*

Reprinted 1980

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Dundee, Edinburgh, Glasgow, and St Andrews, at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. "Scottish Birds" is issued free to members.

The affairs of the Club are controlled by a Council composed of the Hon. Presidents, the President, the Vice-President, the Hon. Treasurer, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

Full details are given in the Syllabus of Lectures Card of the names of the present Office-bearers of the Club.

An official tie with small white Crested Tits embroidered on it can be obtained in dark green or in navy blue by Members only from Messrs R. W. Forsyth Ltd., Princes Street, Edinburgh, or 5 Renfield Street, Glasgow, C.2, at a cost of 13s 9d post free. A small brooch in silver and blue can be obtained for the use of Members of the Club. Price 2s 6d each from the Secretary, or from Hon. Branch Secretaries.

Forms of application for Membership, copy of the Club Constitution, and other literature is obtainable from the Club Secretary, Mrs George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7. (Tel. Waverley 6042).

CLUB-ROOM AND LIBRARY

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to members during office hours, and on Wednesday evenings from 7 to 10 p.m. (except the Wednesdays of Branch Meetings). Members may use the Reference Library and borrow books from the Duplicate Section. Facilities for making tea or coffee are available at a nominal charge and members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen may be used for the informal showing of slides at a charge of 2s 6d per night to cover the replacement of bulbs.

Informal meetings for Junior members will be held in the Club-room on the first Friday of each month from October to April at 7.30 p.m.

NOTICE TO CONTRIBUTORS

All notes dealing with birds in the eastern Lowlands, from Berwick-on-Tweed to Dundee, should be submitted to A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh, 13; all other contributions to M. F. M. Meiklejohn, 20 Falkland Street, Glasgow, W.2. It would be helpful if notes were typewritten, if possible, and double spaced.

SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 2 No. 3 *REPRINTED 1980* **Autumn 1964**

Edited by A. T. Macmillan with the assistance of D. G. Andrew and T. C. Smout. Business Editor, Arthur J. Smith. Cover Design (Leach's Petrel) by Len Fullerton. *Published quarterly.*

Editorial

Bird-watching in Sutherland. A large part of the present number of *Scottish Birds* consists of a study by our Vice-President, Dr Ian D. Pennie, of changes during the past 100 years in the breeding birds of Sutherland—a wild and relatively unspoilt county with a strong lure for bird-watchers. This sort of paper has a special interest when considered against the background of the changes which have come with the gradual amelioration of the northern climate: the retreat northward of the Little Auk, or the advance of other species into the Arctic. A recent issue of *Sterna* (5; 80-88), for instance, gives the first breeding records of Wheatears on Spitsbergen, in 1959, and records Starlings with a nest that summer on Bear Island—the most northerly breeding record in the world for this species.

Aberlady Bay. Towards the end of June, impressive pictures appeared in the press of members of the University Federateion for Animal Welfare up to their middles in the mud of the Marl Loch at Aberlady Bay Nature Reserve. The loch had become overgrown with weeds, and by clearing them away it was hoped to attract birds to it again. The task was organised by the Conservation Corps of the Council for Nature and carried out by U.F.A.W. members from the Royal Dick Veterinary College led by Eric Millar. In a quiet way various improvements have been made for the birds at Aberlady in the past few years, and this latest effort will undoubtedly make the area more attractive for them.

Sparrowhawks. In many parts of Scotland, if not everywhere, the Sparrowhawk seems to have become very scarce. This could be a natural decline, even though it is the only hawk which does not enjoy protection under the Protection of Birds Act, 1954. As we write, there is a proposal to put it on the protected list in Scotland. Apart from any benefit to the Sparrowhawk, this would be a good thing in another way: it would make it that much easier to enforce the Protection of Birds Act against those who destroy Hen Harriers, Kestrels, Buzzards and other hawks. No longer could they plead in mitigation that they mistook the birds for Sparrowhawks.

Nightjars. The June 1962 issue of *Bird Study* (9: 104-115) contains a report on the "Nightjar enquiry, 1957-58" by J. Stafford. This is a very scarce and local bird in Scotland, but such information as was available has been summarised here, though it is hardly possible that it can represent a true picture—when one considers the nocturnal ways of the bird and the very thin cover of bird-watchers over great areas of suitable country in Scotland.

Toxic Chemicals. Everyone with an interest in the countryside should read the second report of the Joint Committee of the B.T.O. and the R.S.P.B. on toxic chemicals (*Deaths of birds and mammals from toxic chemicals, January-June 1961*). Here is the evidence of the catastrophic damage that can be done to wild life by the unwitting misuse of chemicals in agriculture. Mercury and organo-chlorine compounds—the chemicals which have done most of the damage—linger in the corpses and a chain reaction may be set up, so that birds die from eating poisoned insects, and animals die from eating the birds. The possibilities are fearful, and some of the instances of which we have heard—not simply concerned with birds—are very serious. One can only hope that everyone involved realises the seriousness and urgency of the problem, and that effective control will be achieved over the use of dangerous chemicals in agriculture. Copies of the report can be had from the R.S.P.B. at 21 Regent Terrace, Edinburgh.

WITHOUT COMMENT

"**Sea-Gulls in the Meadows**: A good deal of curiosity was excited on Sunday last, by the appearance of a flock of sea-gulls in the Meadow Parks, where they have remained ever since, picking up any odds and ends which fall their way, and apparently living on the most friendly terms with the crows from the adjoining rookeries at Lady Lawson's Wynd and the trees near East Lauriston Lane, frequently rubbing shoulders with one another without showing fight. They are probably on the return from the south country, where great numbers congregate in the summer months, to head-quarters on the sea-coast, where they generally spend the winter."

—From *The Scotsman,* Edinburgh,
Saturday, 8th October 1836.

A CENTURY OF BIRD-WATCHING IN SUTHERLAND*

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The "Century" referred to in the title of this paper is merely a round figure, and should more exactly be 127 years, as the first proper study and published account of the birds of Sutherland was that of P. J. Selby (1836) who made his bird-watching tour of the county in 1834 along with Sir William Jardine, and left a valuable record which has been the basis for all subsequent work on the county's birds.

The only work of any significance prior to Selby's is Sir Robert Gordon's well known list of the beasts and birds made in 1630: "... All these forrests and schases are verie profitable for feiding of bestiall, and delectable for hunting. They are full of reid deer and roes, woulffs, foxes, wyld catts, brocks, skuyrrells, whittrets, weasels, otters, martrixes, hares and fumarts. In these forrests, and in all this province, there is a great store of partriges, pluivers, capercalegs, blackwaks, murefowls, heth hens, swanes, bewters, turtledoves, herons, dowes, steares or stirlings, lair-igigh or knag, (which is a foull lyk vnto a paroket, or parret, which maks place for her nest with her bek, in the oak trie), duke, draig, widgeon, teale, wildgouse, ringouse, routs, whaips, shot-whaips, woodcok, larkes, sparrowes, snyps, blackburds or osills, meweis, thrushes, and all other kinds of wild-foule and birds, which ar to be had in any part of this kingdome ..."

This would indicate that there was still pine forest in Sutherland in the seventeenth century, but by the middle of the eighteenth century the pines had gone, and with them went the wolves, squirrels and Capercaillies, but the "martrixes" have survived, even to this day, by adapting themselves to live in cairns and to hunt rabbits instead of chasing squirrels through the pine tops. A minute fragment of original pine remains in Glen Einig, which is just over the boundary into Ross-shire, but in Sutherland even the ancient pines in Strath Oykell are almost certainly the remains of early plantations, only those on the shore and islands of Loch Assynt having any possible claim to be descended from other than plantations (Steven & Carlisle 1959).

On the other hand, eighteenth century Sutherland was by no means barren and devoid of trees; birchwoods were much more extensive than they are today, as were the oaks in the valleys, of which only a few isolated patches remain, such as those at Aberscross in Strathfleet, and there were alders on the river sides. Added to this, coniferous plantations had already begun to be established in the latter half of the eighteenth century in the south and east (Sinclair 1793), among the earliest and most notable being those at Rosehall where Kites flourished in the early nineteenth century (Harvie-Brown & Buckley 1887) and which had all the appearance of natural pine forest when they were clear felled during the last war.

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Little had been done in the way of land improvement by the close of the eighteenth century other than the establishment of these first plantations. Access was by sea only, for the bridge at Bonar was not constructed until 1813; there were virtually no roads except on the east coast between Dornoch and Wick, and even on this a dangerous ferry intervened at the mouth of Loch Fleet, for the road by the Mound was not built until 1816—previously the lower half of Strath Fleet was a great fjord with the tide running inland as far as Pittentrail. It is difficult to realise that the alder swamp at the Mound has appeared only since the Mound itself was built, and the alders must have grown very quickly, as the *New Statistical Account*, writen in 1840, records that "400 acres of beach above the Mound, which may in time become arable, are gradually assuming a coating partly of herbage, and partly of alder trees" and refers to the River Fleet which "enters an extensive plain, once covered by every tide from the Moray Firth, but now encroached upon only by this stream . . . in this place, where it is not confined by the . . . agriculturist, it appears almost completely lost among rapidly growing alders."

Vast undrained bogs lay over much of the lower ground—Sir Robert Gordon had Bitterns on his list, and even as late at 1848 St John heard them in the Shinness marshes, which were not drained until much later—but malaria, which was endemic and widespread in Scotland until late in the eighteenth century (Creighton 1891, 1894), was prevalent as far north as Tongue (Sinclair 1792; Ritchie 1920), and in 1793 (Sinclair) there is a complaint from Dornoch of the nuisance caused by a large morass "extending upwards of two miles westwards of the town."

This was the Sutherland of the days before the improvements of the early nineteenth century, but for our particular interest almost completely undocumented. The events of the first quarter of the nineteenth century were cataclysmic, and their effects far-reaching, for the reverberations of that great social upheaval have not yet died down. It is not my purpose here to dissert on the Highland Clearances except in so far as they affected the wild life, but with the coming of the sheep began the persecution of the eagles. Previously the small tenants had few sheep and little reason to destroy eagles; their firearms were of a poor sort and, as Evander MacIver has pointed out (1905), the banning of firearms in the Highlands after the Forty-five was probably conducive in a big way to the increase in the birds of prey. With the sheep came the necessity to destroy eagles, and it happened that about the same time the parish minister of Belhelvie was conducting his diabolical experiments which gave us the percussion cap and small arms of immensely increased efficiency. The effect of the resultant onslaught on the birds of prey can be judged by the list which Selby has given of vermin destroyed on the Sutherland Estates alone in three years from March 1831 to March 1834—171 adult eagles, 53 young eagles and eggs, 936 Ravens, 1055 hawks, 1739 crows and Magpies, 548 Dippers—then known as "kingfishers." Such lists must however be accepted only with great caution. Selby does not give the source of his information, which presumably was derived from a list of bounties paid during the period, and as such must be regarded as liable to all sorts of inaccuracies and falsifications. The same applies to the figure given for bounties paid for eagles killed in Norway and referred to below.

Sheep farming had become really profitable by about 1830, and about the middle of the century shootings in the north began to have a commercial value and to be a valuable source of income; consequently the combined efforts of the grazing sheep and the heather-burning of the shepherd and the grouse-moor keeper have so militated against the birch and oak woods as to reduce them to the few pitiable remnants we have today. In many places the only minute fragments of woodland surviving are on the islands in lochs, where they have remained immune from tooth and fire. This has of course had a tremendous effect on the fauna; even the parish minister of Tongue noticed it when he was compiling his chapter for the *New Statistical Account* in 1845, for he says that "game is not so abundant as formerly owing to the extensive moor burnings upon the sheep farms." An intensification of the onslaught on the predatory birds no doubt accompanied the commercialisation of the sporting rights, but on the other hand the arrest of the decline of the Golden Eagle was almost certainly assisted by the partial failure of sheep farming in the 1870's and 1880's when several of the large farms of west Sutherland were turned into deer forests where eagles are regarded with greater tolerance.

There have, no doubt, been other factors affecting the condition of the woodlands, and just as an alteration in climate appears to have been responsible for the disappearance of the pine forest in earlier times, there is evidence, from contemporary accounts, of a deterioration in climate at the close of the eighteenth century which had a deleterious effect on the deciduous woods of the valleys of Sutherland (Henderson 1812). The deterioration of the birchwoods continues, and some of the finest, such as those at Loch a'Choire, Loch Naver and Strath Beg are doomed unless some regeneration is permitted. The immediate and profuse growth of young birch in a strip fenced against sheep and deer is well seen at Loch a'Choire where the regeneration is strictly limited to the small area fenced. The 150 acres of oak copse at Creich, which was referred to by Henderson(1812), fortunately still remains, and is a favourite haunt of Wood Warblers and Tree Pipits, but the magnificent oaks at Aberscross are unfenced and on heavily grazed land, with consequently no young growth at all. These northern oaks appear to fruit about once in ten years.

As the development of forestry schemes has an obvious influence on the spread of woodland birds it is of importance to give some indication of the area and distribution of coniferous plantations. The sources of information are the *Old Statistical Account* (Sinclair 1791-99), Henderson (1812), the *New Statistical Account* (1845), also personal communications (1961) from the Director (Scotland) of the Forestry Commission, and from J. P. Whittet, Estates Office, Clashmore, William Ross, Dunrobin, and John D. Murray, Achfary, to all of whom my thanks are due. The distributions here given are roughly in accordance with the three Faunal Areas into which Sutherland falls, and are in all cases approximate only, as no attempt has been made to list every small block of timber in the county.

SOUTH-EAST. 1793: plantations of fir "of no great extent" in Dornoch Parish; "considerable plantations" of firs in different parts of Creich Parish, the largest being at Rosehall; and under Golspie reference is made to deer raiding the plantations at Dunrobin. 1812: "several hundred acres" between Dornoch and Rosehall; 300 acres of Scots fir at Dunrobin besides smaller blocks at Uppat, Strathbrora, and Kintradwell. 1845: at least 5,500 acres in all, increasing annually. 1961: over 18,000 acres.

WEST. 1845 and earlier: none. 1961: 2,500 acres.

NORTH. 1812: a plantation of Scots fir at Tongue. 1845: "with a trifling exception, all the trees in the parish (Farr) are indigenous, hazel, alders, rowans, willows and birch." 1961: 4,000 acres.

The early nineteenth century saw the opening up of Sutherland by roads and bridges. A parliamentary road having been made from Lairg to Tongue and thence to Thurso, the Sutherland family constructed a road from Bonar Bridge to Assynt, by way of Strath Oykell and Loch Assynt, and continued this programme by building in 1829 a road from Skiag Bridge to Kylesku Ferry, thence to Scourie, Rhiconich, Durness, and finally over the Moine to Tongue to join the parliamentary road. All this cost about £35,000. The road from Lairg to Laxford Bridge was not added until 1850, this too being made by the Sutherland family. The Highland Clearances had removed much of the old population from the inland valleys to the seaboard, where most of the crofting communities are today, but the potato disease of 1846 and the following years brought about hardship and consequent emigration on a large scale. This is where serious depopulation really commenced, and I mention this principally to give an opportunity of noting that it was in 1848 that the eight small tenants left the island of Handa (MacIver 1905), famous for its sea-bird colonies, which then became a sheep run tenanted by the Scourie factor.

The social history of Sutherland is of such absorbing interest that it is only too easy to digress far from the title and purpose of this paper, and it is necessary at this point to revert to the construction of the west coast roads in 1829, along which were to travel in a very few years the first ornithological tourists. In 1834, almost as soon as the road from Kylesku to Durness was completed, the first party of bird-watchers arrived. How many were in the party we are not told, but the principal members were Prideaux John Selby, author of one of the standard text-books on British ornithology, and Sir William Jardine, who is perhaps best known as editor of Jardine's *Naturalists' Library*. Among the party was James Wilson, who in 1841 made the voyage round Scotland and wrote a book about it (Wilson 1842). Selby and Jardine quite obviously knew their business and left an excellent record of their observations (Selby 1836). They recorded 94 species, and added two more seen by James Wilson but not by themselves—a pair of Goldfinches and a Nightjar.

Selby's list reflects very much the primitive and undeveloped state of the county at a time when the larger raptors were still abundant, although every measure and every device, fair and foul, was being used to destroy the two species of eagle and the Raven. The White-tailed Eagle in particular seems to have welcomed the addition of mutton to his diet. An old sheep farmer in Caithness once told me that there had been a saying in the north at the time when sheep were first introduced, that all would be well in the world "but for the erne and Buonaparte."

"Ospreys," says Selby, "are most abundant in the west," and they saw three or four together on the wing at the mouth of the Laxford River: "they remain unmolested by hunters, as they never attack lambs, their food being entirely restricted to fish." That was in 1834, when the first ornithologists arrived, and the subsequent story is so well known that it scarcely requires repetition: by the time Harvie-Brown made his first visit to the north in 1867 the Osprey was extinct. James Wilson, as we know, visited Sutherland again in 1841 during the course of his voyage, but on this occasion he seems to have been more interested in the fishing than in the bird-watching. He did however note an Osprey on the Laxford River, but makes the ominous comment that he was informed that "these birds are destructive, to an almost incalculable extent, to the sea-trout." It is not possible here to go through the whole of Selby's list, but I might mention his records of geese and ducks. He recorded geese breeding on several lochs, including 30-40 pairs on Loch Loyal, but he called them Bean Geese. He had the first breeding record of Wigeon in the British Isles, and almost did the same for Scaup; he shot a female which had a single duckling with it, but the duckling escaped and so its parentage was never proven.

In 1847 the rush really started; in that year Sir William Milner and his brother Henry travelled through Sutherland from Bonar Bridge to the north coast "shooting and collecting everything" (Milner 1848). They shot a Golden Eagle and took the eggs on Ben Stomino; they recorded Grey Lag Geese (and harried their nests) on Loch Shin, Loch Assynt and Loch Naver, but they still listed the Loch Loyal geese as Bean Geese—and harried their nests too, commenting that they are "so constantly robbed that they are leaving Loch Loyal and are betaking themselves to smaller lochs." This disturbance has continued ever since, so it is quite astonishing to find that two or three pairs of geese still nest on Loch Loyal.

The following year, 1848, was the year of St John who, along with William Dunbar and a friend referred to as "Mr J.", covered a great part of the county that summer, travelling in a boat on wheels, pulled by a highland pony. When they came to a loch which they wished to explore they simply removed the wheels and launched the boat. St John's depredations of the Ospreys are too notorious to be worthy of further mention, but a few of his records warrant another look. He arrived in time to see the last Choughs in the north, which strangely enough he did not shoot; and in all fairness it should be pointed out that it was Dunbar and not St John who shot the only pair of Red-necked Phalaropes ever known to have bred in Sutherland. He tells us that "the Dotterel breeds on Clibreck," but he did not see them himself as he was caught in thick mist and rain on the one climb he made. It is possible that the Dotterel bred there in former times, and there is a specimen in the Dunrobin museum labelled

"Clibreck 1846." St John's records however are not anything like so valuable as those of Selby and Jardine: he did not know his birds well at all, and many of his statements and identifications are quite untrustworthy and inaccurate. "Mr J." was evidently Thomas Jeans of Bath, an old school friend of St John's who joined him for at least part of the visit to Sutherland in 1848. St John resided at Rosehall for a time about 1834 but was living in Morayshire when he made his 1848 tour; he seems to have revisited Sutherland subsequently, as John Hancock of Newcastle (1874) says that in 1849 he "accompanied Mr St John to Sutherlandshire on an ornithological tour," referring to the neighbourhood of Dunrobin.

John Wolley was a friend of the younger Milner, who no doubt gave him an enthusiastic account of his Sutherland exploits, so much so that Wolley was next in the field, in 1849, and did the round of the Osprey sites once again, almost killing himself in the effort of taking one particular clutch of eggs, but that did not chill his enthusiasm in the slightest. Wolley was not only an energetic egg-collector, but was an accurate and painstaking diarist; he died at an early age, but his note-books were edited and published by Alfred Newton (1864-1907) under the title of *Ootheca Wolleyana,* a valuable and much neglected book of reference. Wolley was worried about the incessant persecution of eagles by collectors, farmers, and grouse-moor owners, and it is interesting to note that in 1849 the Golden Eagle was the rarer of the two, and he was quite certain it would be exterminated before the White-tailed Eagle, which lasted out until the end of the century. They were exterminated at Cape Wrath in 1879, but Jourdain had a clutch which was taken in Sutherland in 1901 (Baxter & Rintoul 1953) though it is not recorded where.

Another great Osprey hunter was Roualeyn Gordon-Cumming, who took Ospreys' eggs in Sutherland about the same time, but all his letters and records were destroyed after his death, so comparatively little is known of his exploits.

J. A. Harvie-Brown was in Sutherland in 1867 and 1868: by this time the Osprey was extinct, but he saw a White-tailed Eagle and heard of several eyries, but still had not exploded the theory of the Bean Geese. Harvie-Brown's most remarkable record was of a pair of Great Northern Divers which had all the appearance of breeding in Assynt on an isolated loch with a small green island in it. Unfortunately it was impossible to bring a boat to the loch and the supposition of breeding remains unconfirmed (Harvie-Brown 1868).

T. E. Buckley lived in Sutherland for several years, first at Balnacoil in Strath Brora, and later at Glen Rossal at the lower end of Glen Cassley. Buckley wrote several papers on the birds of Sutherland (1882, 1892) and collaborated with

Harvie-Brown in the volume on Sutherland in the Vertebrate Fauna series (1887).

E. T. Booth, who is best known for his great book of *Rough Notes* (1881-87), was in Sutherland in 1868, 1869 and 1877. He made some interesting and original observations and has been credited by the Misses Baxter and Rintoul (1953) with finding Kites breeding in Sutherland in 1877 in Glendhu on the north-west coast. This is however a mistake. Booth was in west Sutherland in 1877, but he was also in the Spey Valley. Careful study of the chapter on the Kite in *Rough Notes* shows that not only is Booth's description of Glendhu inapplicable to the Sutherland glen of that name, but it appears that he invented the "Glendhu" to conceal the true name of a glen in the Spey Valley where Kites were nesting. Reference to Booth's original field note-books in the Dyke Road Museum, Brighton, confirms this, and also reveals a record of a possible Kite's nest, not given in *Rough Notes*, which was shot out at Loch Sionascaig on the borders of Ross and Sutherland in 1877. My thanks are due to Dr W. R. P. Bourne for extracting records from Booth's note-books with the permission of the Director of Museums, Brighton.

In his chapter on grouse, Booth says that he "watched for some Red-necked Phalaropes that frequented the shores of Loch Craggie, a few miles north of Loch Shin"; he does not state whether he actually saw them himself, and he wrote no chapter on the species. Harvie-Brown and Buckley (1887) simply dismiss this by saying that they know of no loch of that name in the place described. There does however happen to be a Loch Craggie in approximately the situation given by Booth, and what is even more interesting, reference to his note-books shows an entry "Red-necked Phalarope, three on Loch Doula, near Lairg, 15th June 1868, not seen later." Loch Doula is adjacent to Loch Craggie and would be an excellent place for phalaropes.

This brings us to the end of those who may be termed the original explorers of Sutherland birds, and also more or less to the end of the era of the skin collector. The egg-collectors continued, and there were regular visits from such men as Norman Gilroy, who studied Greenshanks at Altnaharra and who published privately a series of papers on their hitherto undescribed nesting habits, but who rather spoiled the story by detailing the state of incubation of the eggs of every nest he found, and another well-known collector who published nothing and was fined in the Dornoch Sheriff Court for stealing Grey Lag Goose eggs from Loch Loyal. The egg-collector has proved more difficult to exterminate than some of the birds, and Caithness and the north coast are still subjected to seasonal visitations from these oophilous kleptomaniacs from the south.

The gradually increasing popularity of summer holidays in the Highlands for persons other than the wealthy few has in more recent years kept a constant trickle of short notes from Sutherland appearing in the journals, but the general use of the motor car really opened up the north for the bird-watching tourist, who so often comes across something exciting purely by chance, such as the Bramblings which nested at Altnaharra in 1920 (Hodgkin & Hodgkin 1920); and it was a chance observation from a car window by a member of the Scottish Ornithologists' Club which last year gave us the first authenticated record of a Whimbrel breeding in the county (Henderson 1961). Ringing was started very early in Sutherland, again principally by the summer visitors, and there are recoveries of Buzzards, Herons, owls and Cormorants—all species likely to be destroyed by keepers—from 1913 onwards; but the first recovery of a bird ringed in Sutherland was much earlier even than these—a Wigeon ringed at Loch Brora with an Aberdeen University ring on 19th June 1909 and recovered in the Netherlands in September of the same year (Thomson 1912).

The number of persons spending their summer holidays bird-watching increases annually; Highland hotel-keepers are now beginning to realise that the bird-watcher forms a recognised section of the annual body of tourists; one Sutherland hotel publishes a brochure advertising the attractions of the district for the bird-watcher, and it is most revealing that the Sutherland Tourist Association should place bird-watching as an attraction second only to the fishing. Live birds mean money, and a pair of Ospreys nesting now on the ruins of Ardvreck Castle would bring more trade to the hotels in the district than all the fish in Loch Assynt.

Some of the changes which have taken place in the County of Sutherland in the past century have been outlined briefly, and at rather greater length some of the changes in the bird-watchers; it is now possible from the records left by the latter to trace a great many changes which have taken place among the birds since Selby crossed the Kyle of Sutherland. In some instances it is possible to correlate them with changes in land use, and other human factors, and in a few with similar changes which have occurred elsewhere in western Europe.

The following list is of those species in which an alteration in numbers or distribution within the county of Sutherland can be traced durng the past 130 years: it is not a complete list of the breeding birds of Sutherland. I have not included such species as Redwing, Wood Sandpiper and Whimbrel, whose recent sporadic breeding does not necessarily indicate any true change of status, but I have included others like Gadwall and Great Skua where events elsewhere suggest the possibility of impending colonisation of Sutherland. The full significance of the changes is often apparent only when compared with corresponding changes elsewhere, such as are detailed by Alexander and Lack (1944) for the British Isles as a whole, Haftorn (1958) for Norway, and Gudmundsson (1951) for Iceland, and it is suggested that these papers should be used as a comparison.

LIST OF SPECIES

SLAVONIAN GREBE *Podiceps auritus*. First found breeding in the centre of the county in 1929, when there were four pairs (Baxter and Rintoul 1929). Has bred more or less regularly since then, but appears to have missed some years and there have never been as many as four pairs again.

FULMAR *Fulmarus glacialis*. First recorded at the Clo Mor in 1897 (Clarke 1897), and in 1902 a pair was seen on Handa and about a dozen pairs on the Clo Mor (Tait 1902): even in 1912 no further breeding site was known (Harvie-Brown 1912). On the east they bred at Strathsteven, near Brora, in 1939 (Fisher and Waterston 1941), and appeared on the roof of Dunrobin Castle in 1947 (Darling and Morley 1947). Eggs were laid on the castle roof in 1954 though it was not known if young were reared, but at least one was reared in 1955. From occupying almost the whole coastline the Fulmar is now spreading inland in a most remarkable manner to such places as the Mound Rock, Torboll Rock, Morvich Rock and Carrol Rock, which is right at the top end of Loch Brora; on 8th July 1961 one was flying over the north end of Loch Loyal below Ben Stomino.

GADWALL *Anas strepera*. Has bred sporadically since 1913 (Baxter and Rintoul 1922), but is still extremely scarce. A pair was seen in the Tongue district in June 1958 (*Scot. Birds* 1: 197) and I have had a report of a breeding pair in the south-east in 1961. In view of this, and the fact that it is a species which has increased greatly in Iceland (Gudmundsson 1951), the Gadwall will be worth watching for in Sutherland.

WIGEON *Anas penelope*. Had never been recorded breeding in Britain before 1834 when Selby saw several pairs near Lairg and took a clutch of eggs at Loch Loyal. In 1848 St John said it was breeding in a few localities, and in 1867 it was "scattered sparingly over the county" (Harvie-Brown 1867); in 1887 they were common in the centre, north and east, but not in the west (Harvie-Brown and Buckley 1887); and from 1901 onwards they have bred sparingly near Inchnadamph (Harvie-Brown and Macpherson 1904), but are still very scarce as breeding birds in the west.

TUFTED DUCK *Aythya fuligula*. Up to 1935 was never known to breed, but in that year nested at Loch Caladail, Durness

(Oldham 1935 (3)). Has nested regularly since and has increased to about twenty pairs, restricted to the limestone lochs of the Durness district. Baxter and Rintoul (1953) say that it nests in the south-east, but if in fact it does, it is neither widespread nor plentiful, although there were two drakes on a loch near Lairg on 10th June 1961, and Ian Downhill saw four drakes and a duck at the same place on 16th July 1961.

EIDER *Somateria mollissima.* Was breeding on the Rabbit Islands, Tongue, in 1848 (St John); spread to Loch Eriboll in 1881 (Harvie-Brown 1904), and by 1902 was plentiful from Cape Wrath to the Badcall Islands (Harvie-Brown and Macpherson 1904), appearing in Lochinver Bay in 1904. In 1935, 50 females with broods were seen off Farraid Head (Oldham 1935 (2)). In the east the first nest was found in 1915 or 1916 near Navidale, and as far down as Loch Fleet broods of ducklings were seen in 1956 (Pennie 1959). On 10th July 1961 there were about a dozen ducklings between Cambusmore and Skelbo. One interesting feature of the increase of Eiders is the build up of a pack at the bar of Loch Fleet in autumn. The birds gather in September, and the maximum is reached by the beginning of October. In 1961 there was a pack of over 500 in the ratio of about three drakes to two ducks.

GOOSANDER *Mergus merganser.* First bred in the south-east in 1875 and in the west in 1878 (Harvie-Brown 1887). A clutch of nine eggs in the Chance collection was taken on the Vagastie Burn, Altnaharra, on 25th April 1914, and I was told by The Hon. G. L. Charteris in 1958 that Goosanders used to be quite common around Altnaharra but were regularly shot on the nest by the keepers. They are still found on the rivers of the centre, west and north, but the numbers are severely kept down. Being much more a bird of the rivers than the Red-breasted Merganser it is much more open to persecution than the latter.

GREY LAG GOOSE *Anser anser.* In 1834 the Grey Lag bred on Loch Shin and Loch Naver, and there were 30-40 pairs on Loch Loyal (Selby), but by 1848 they were deserting Loch Loyal (Milner), and were down to one pair in 1886 (Harvie-Brown and Buckley). Loch Shin was deserted by 1890, but they were still plentiful at Badanloch in 1892 (Buckley), although they deserted Loch Brora about this time. Scattered pairs still breed in the west, and there are small colonies in the centre. The Loch Loyal colony came up to about eight or nine pairs in 1940, but has dropped again to two or three. A feral flock of pure Scottish Grey Lags was established on Loch Brora in 1937 and had increased to 200 in 1955, by which time the birds were completely wild. Unfortunately the proprietor has had them reduced in numbers and there are only 30 or 40 left; there is no doubt that the Loch Brora birds have helped to keep the county's stock going. The general position is bad, but not hopeless, and a lot could be done to help.

BRENT GOOSE *Branta bernicla*. In St John's time there were said to be immense numbers on most of the inlets of the sea in Sutherland in winter. In 1869 Booth saw parties of 50-100 at the Little Ferry, but in 1882 Buckley said "a few every winter," while in 1896 they were still found in all estuaries from the Little Ferry southwards (Harvie-Brown and Buckley). There has been a great decrease since then, and Brents are now scarcely ever seen on the Sutherland coast. The only recent records are of four Dark-breasted birds on Loch Fleet on 24th-26th February 1956, and one on 2nd December of the same year. D. MacDonald informs me that the only recent record for Dornoch was a flock of about 30 seen by him on 20th October 1951.

BARNACLE GOOSE *Branta leucopsis*. Up to 1887 the Barnacle was reckoned as occasional only to Handa and Scourie (St John; Harvie-Brown and Buckley). After the human population was evacuated from Island Roan in 1938 Barnacle Geese began to winter there and on the adjacent Eilean Iosal. Now 200-300 winter there annually and a few straggle over to the crofts in Melness and Skerray. I have twice attempted to count them. On 28th March 1949 with a telescope from the mainland I counted at least 300, and on 13th December 1955 I spent a whole day ashore on Island Roan and counted exactly 210 geese.

GOLDEN EAGLE *Aquila chrysaëtos*. Eagles were still fairly common in 1834 but, between 1819 and 1826, 295 eagles (both species) and 60 eggs and young were taken in Sutherland and two adjoining estates in Caithness (Harvie-Brown and Buckley 1887) and, from 1831 to 1834, 171 adults and 53 eggs and young on the Sutherland estates alone (Selby), that is 466 adults and 113 eggs and young in a total of ten years. Scotland was not alone in this sort of thing, for in the five years ending December 1850 bounties were paid in Norway on 10,715 eagles (Newton 1864). In the face of all this there was such a rapid decrease that in 1849 the Golden Eagle was in grave danger of total extermination, much more so than the White-tailed Eagle (Newton). In 1867 however, Harvie-Brown remarked that the Golden Eagle "still breeds in Sutherland." A nominal protection of the species began on the Sutherland estates in 1875, but there seems to have been little increase before 1900. A great increase took place during the 1939-45 war, and in 1947 there were more Golden Eagles in Sutherland than there had been for a hundred years, but since then there has undoubtedly been a decrease again. This may be partly due to surreptitious shooting and poisoning, but it is more likely that the myxomatosis of rabbits since 1954 accounts for the great number of empty eyries found in the past few years.

BUZZARD *Buteo buteo*. Selby saw Buzzards in various places in 1834, but in 1848 St John's report was that, although they had been common a few years previously, they were now completely exterminated except in the wilder parts. In 1867 Harvie-Brown found them "still plentiful," but twenty years later "uncommon in the east: commoner in the west, but less so than formerly." Buckley (1892) refers to their increasing scarcity, and in 1904 they were much rarer in the west and becoming more so (Harvie-Brown and Macpherson). Since then the Buzzard has increased again and is plentiful in the east, probably more so than in the west, although there was some decrease after the myxomatosis came, the previous increase probably being in a great way due to the increase in rabbits. Buzzards are still shot by keepers in many parts of Sutherland.

SPARROWHAWK *Accipiter nisus*. Was said to be common in the south-east in 1848 (St John), and bred in Tongue for the first time in 1867 (Harvie-Brown 1875). In 1887 it was increasing greatly in the south-east and regular in Tongue (Harvie-Brown and Buckley), but it was still unrecorded from the west in 1904 (Harvie-Brown and Macpherson). It now occurs regularly wherever there are plantations, including both the Reay Forest area and Assynt, but is harried so mercilessly everywhere that it is rapidly becoming extremely scarce.

KITE *Milvus milvus*. Was not recorded by Selby in 1834 and must have been rare even then, although Harvie-Brown and Buckley (1884) say it was common in Rosehall in the early years of the century. It was seldom seen in St John's time, and only in wooded areas, but according to Baxter and Rintoul (1953) there are clutches of eggs in the British Museum taken in Sutherland in 1859 and 1860. As already shown, Booth's record does not refer to Sutherland.

WHITE-TAILED EAGLE *Haliaëtus albicilla*. Was common on the east coast in 1840 (*New Statistical Account*) and inland in 1848 (St John) at which time it was more plentiful than the Golden Eagle (Newton 1864). In 1867 it was still not uncommon (Harvie-Brown), but by 1875 it was already less plentiful than the Golden Eagle. In 1877 there were few eyries left, and the last clutch of eggs known to have been taken in Sutherland was taken on 4th April 1901. This clutch was in the possession of the late Rev. F. C. R. Jourdain, according to Baxter and Rintoul (1953), but so far my efforts to trace either the clutch or the data have been unsuccessful. There have been no recent authenticated records in the county, but on several occasions I have had second-hand descriptions of what may have been White-tailed Eagles seen on the north and west coasts.

Hen Harrier *Circus cyaneus*. Selby saw a female between Altnaharra and Loyal in 1834, and Milner in 1847 found a nest at the foot of Ben Stomino. Hen Harriers were common in the west until 1877 (Harvie-Brown and Buckley 1887), but became extinct soon after that. They lasted longer in the east and centre where they were holding their ground well in 1882 (Buckley), but were exterminated throughout the county by the close of the century. Correspondence with the author of a Nature Note in *The Scotsman* of 21st February 1948 disclosed that a male harrier had been seen hunting in the centre of the county in August 1945, and that in May 1946 the keeper there had destroyed two nests and shot the hens. The nests were about 200 yards apart and were attended by a single cock, which escaped. In 1947 a nest escaped the attentions of the keeper and a brood was reared. A few pairs now nest annually in different parts of central and east Sutherland, but Hen Harriers are easily shot and very easily caught on pole-traps, which are permitted and even encouraged by some of the more selfish and single minded proprietors, and consequently these birds do not increase much.

Osprey *Pandion haliaetus*. The story of the Osprey in Sutherland is already well known. It is now a scarce but almost regular passage migrant, and on several occasions in the last few years single birds have remained for a week or more, but recent rumours of breeding have not been substantiated. It is pleasing to record that these passage Ospreys are no longer shot.

Peregrine *Falco peregrinus*. Described as "common" in 1867 (Harvie-Brown), and in 1887 as "still common, in spite of persecution, with eight eyries on the coast from Whiten Head to Lochinver, and eight inland in Assynt within a ten mile radius" (Harvie-Brown and Buckley). In 1904 it was said to be still common in the west (Harvie-Brown and Macpherson). There may now quite well be eight eyries on the coast from Whiten Head to Lochinver, but it has greatly decreased inland; in fact, with the exception of a very few sites, the Peregrine is almost exterminated inland, but there is not much change in numbers breeding on the coast.

Merlin *Falco columbarius*. In 1867 the Merlin was "next to the Kestrel, the commonest hawk in the west" (Harvie-Brown). In 1887 it was still common, but less so than formerly, and in 1904 still less common. Now it is the rarest hawk of all, and there is less chance of seeing a Merlin than a Hen Harrier in a day's outing on the Sutherland moors.

Ptarmigan *Lagopus mutus*. Buckley (1882) records great decrease in east Sutherland, extinct on Ben Uarie since 1870, also on the Griams, and becoming scarce on Ben Armine; but in 1892 he still found them occasionally, but not breeding, on both of the former. In 1904 Harvie-Brown and Macpherson record a gradual decrease in the west, particularly in Assynt. The present distribution does not indicate much further change; there are still a few on Ben Armine and they are plentiful on the Assynt Hills, including a few on Canisp; in the north they still breed on Ben Loyal and Ben Stomino, and are said to breed on Fashven at 1400 feet, and probably on Sgribhisbheinn at 1200 feet. A survey of the Scottish distribution would be of great interest.

Black Grouse *Lyrurus tetrix*. Plentiful in 1834 (Selby), 1848 (St John), but by 1880 beginning to decrease on the east (Harvie-Brown and Buckley 1887); the decrease continued steadily throughout the county, but blackgame were still plentiful in the Tongue area in the late 1920's, although they eventually disappeared until a few were again seen in the 1940's. During the past two or three years there has been a reappearance and increase near Altnaharra, near Syre, in parts of Rogart, and in the Birichen-Spinningdale region of the south-east. The growth of new plantations may have helped this.

Capercaillie *Tetrao urogallus*. Was listed by Sir Robert Gordon in 1630. There was an unsuccessful attempt at reintroduction at Skibo in 1870 (Harvie-Brown 1879). The spread and distribution are described by Pennie (1950-51); appeared at Skibo in 1910, Balblair (Golspie) 1912, Dunrobin 1922, Ben Bhraggie 1928, Uppat about 1935, and Rosehall prior to 1920. The habitat has now been somewhat restricted by tree felling during the 1939-45 war; there are more Caper in the Skibo woods than anywhere else and there are still a few in the Balblair Wood, Golspie.

Corncrake *Crex crex*. Until 1896 all records state that it is common wherever there is sufficient cultivation, but in that year it was "said by some people to be scarcer than formerly" (Harvie-Brown and Buckley). Since then the Corncrake has gradually but steadily disappeared; it is now very scarce in the south and east where numbers have diminished even in the last ten years; still reasonably plentiful in Strathnaver and in the north and west but is decreasing in these areas also.

Oystercatcher *Haematopus ostralegus*. In 1834 Selby said it "breeds on Loch Shin and on all salt water lochs." In 1871—"never comes inland to breed" (Harvie-Brown 1875). In 1882 Buckley had once or twice seen Oystercatchers seven or eight miles up the Brora River but they stayed only a day or two, and in 1896 he had once seen one up the Cassley

(Harvie-Brown and Buckley). The Oystercatcher now breeds inland in many parts including such places as Loch Stack, Loch Assynt, Alnaharra, Loch Loyal, Strath Naver, and Rhilochan, and in some instances far from water.

Dotterel *Charadrius morinellus.* A specimen in the Dunrobin Museum is labelled "Clibreck 18th June 1846," and nests are said to have been found frequently on Clibreck about 1855 (Harvie-Brown 1875). In 1884—"has been seen on Clibreck by the Altnaharra keeper" (Harvie-Brown and Buckley). There are no certain recent records.

Woodcock *Scolopax rusticola.* Not recorded by Selby in 1834. St John (1848) says "of late years commenced breeding in most of the large woods." There were many breeding at Dunrobin in 1849 (Hancock 1874); plentiful in east Sutherland by 1853 (Buxton), and by 1887 common all over, including Tongue and Assynt (Harvie-Brown and Buckley).

Great Skua *Catharacta skua.* One seen on Handa and one near Scourie on 9th July 1959 (Dickinson and Harris 1959) are the first recorded in the county, apart from an October record of a young bird (Baxter and Rintoul 1910); I have details of four subsequent unpublished records from the north and west. As it now breeds in the Outer Hebrides (Cunningham 1959), and has regularly attempted to do so elsewhere on the mainland since 1949 (Pennie 1953, Sage and Pennie 1956), it may soon be found breeding in north or west Sutherland.

Greater Black-backed Gull *Larus marinus.* Selby saw a few on the firths in 1834. In 1847 Milner found all gulls plentiful except Greater Black-backed. In 1871 there were 15 pairs on Handa, and it was not very common otherwise (Harvie-Brown 1875), but in 1892 Handa was deserted following raids (Buckley). On Eilean Bulgach it has increased from one pair in 1927 to 150 pairs in 1948 (Fisher and Piercey 1950). It is now very plentiful on the Cape-side and on Handa, and scattered pairs nest all along the north coast. On the east coast it also nests in fair numbers, as on Loch Fleet, but it is a rare breeder inland.

Lesser Black-backed Gull *Larus fuscus.* In 1834 there were many colonies on Loch Shin, Loch Loyal and elsewhere (Selby); and in 1847 on Loch Loyal, Loch Shin, Loch Assynt, Loch Naver and Loch Meadie (Milner). In 1867 Harvie-Brown described it as the most numerous species of gull in Sutherland, and in 1882 it was very abundant, but destroyed by keepers and shepherds at every opportunity (Buckley). In 1896 it "used to be very abundant but now much decreased" (Harvie-Brown and Buckley). This is now the rarest gull breeding in Sutherland; it is never seen in the east at any season, occasional stragglers appear in the centre, and a few pairs breed on the north and west coasts. A similar disappearance of Lesser Black-backs in West Ross is described by Mackenzie (1918), and the Venables found a decrease in Shetland for no apparent cause (1955), but Lack (1942) records an increase in Orkney, while it is common and increasing in Faroe (Salomonsen 1935, Williamson 1954), and has increased greatly in Iceland since its first appearance in 1913 (Gudmundsson 1951).

BLACK-HEADED GULL *Larus ridibundus*. Was plentiful in 1834 (Selby), and has continued to be so, but there has been a great increase both in the number and, with few exceptions, in the size of the colonies during the past twenty years. Every known colony in Sutherland was counted in the 1958 survey (Hamilton 1962). There has been a corresponding increase in Shetland (Venables and Venables 1955), in Iceland, where first breeding was in 1910 (Gudmundsson), and in Norway, where first breeding was in 1867, with a great increase and spread north in the past twenty years (Haftorn 1958).

STOCK DOVE *Columba oenas*. First bred in Sutherland in 1889 at Kintradwell, Brora (Buckley 1892), where it increased greatly and was said to be quite common by 1896 (Harvie-Brown and Buckley). Now breeds sparingly in the south-east corner, but is far from common.

WOODPIGEON *Columba palumbus*. Recorded at Tongue in 1834 (Selby). In 1848 it was said to breed wherever there were woods (St John), but apparently was not known in the west until 1869 (Harvie-Brown and Buckley 1884); it spread to Eriboll about 1889 (Buckley 1892), and was not uncommon in Lochinver in 1877 (Harvie-Brown and Buckley 1887). The spread is fairly obviously governed by the growth of plantations.

SHORT-EARED OWL *Asio flammeus*. Not recorded by Selby or Milner. Eggs were taken at Loubcroy in 1851 (Newton 1864). Nested at Dornoch in 1873, and possibly at Loch Awe, Assynt, in 1876 (Harvie-Brown and Buckley 1884), and near Syre in 1886 (Harvie-Brown and Buckley 1887). Buckley recorded in 1892 "very rare in summer and not common at any time." In recent years seems to have been extremely scarce; I saw one at Melness in December 1949, but no more until 27th May 1958 when I saw two in Strathnaver. In 1961 it suddenly became plentiful all over central Sutherland, and throughout June and July one could see four or five in a day anywhere about Lairg, Altnaharra, Strathmore, Loyal, Syre, Rimsdale. This may be due to the Forestry Commission plantations which have been established in the past few years, but it is also worth noting that the Short-eared Owl is one of the species which has commenced breeding in Iceland within the past fifty years (Gudmundsson 1951) and that it has increased in Orkney (Lack 1942).

NIGHTJAR *Caprimulgus europaeus.* One was observed at Loyal by Selby's party in 1834, and it was heard at Tongue by St John (1848). Booth makes no reference to Sutherland, but referring to Ross-shire he says that it was as numerous in Easter Ross in 1869 as in the south of England. Harvie-Brown (1875) stated that twenty years previously it was not uncommon at Dunrobin, but since then it had increased and spread west to Rosehall and to other parts of the east coast. It was breeding at Brora in 1882 (Buckley), but by 1896 was becoming less common in the east (Harvie-Brown and Buckley). It was still heard around Golspie about 1920, and possibly near Brora since then, but is now known to appear regularly in one wood only in the extreme south-east corner of the county.

GREAT SPOTTED WOODPECKER *Dendrocopos major.* The first record other than of autumn migrants was of one at Gordonbush from March to May 1910 (Gunnis 1910). The first nest to be found was at Invershin in 1925 (Paterson 1926), and another was found in south Sutherland in 1930 (Yeates, Robinson and Patrick). It now nests in many places in the south and east, and has nested near Loch Naver since 1949 (Pennie), and once at Lochmore, in 1953.

HOUSE MARTIN *Delichon urbica.* Selby recorded "great numbers on the cliffs at Inchnadamph." St John saw many on the sea cliffs, particularly at Smoo. In 1867 there were only two or three birds at Inchnadamph (Harvie-Brown), and by 1867 this old rock colony was deserted (Harvie-Brown 1878). In 1884 there were none in the Durness caves (Harvie-Brown and Buckley). The House Martin has become much scarcer in the north and west: even in the last two years they have been ousted by House Sparrows from Gobernuisgeach and have deserted Loyal Lodge, but a few still nest in Altnaharra and in Tongue.

RAVEN *Corvus corax.* Is much diminished by unremitting persecution, but still holds its own on the coast and in a few inland localities. Up to 1878 there was a regular roost of over 100 at Badnacoil (Buckley 1882); Baxter and Rintoul (1953) record a flock of 200 at Brora in October 1937.

HOODED/CARRION CROW *Corvus corone.* The Carrion Crow seems to have been rarer at one time than it is now. Selby saw none in 1834, and in 1867 Harvie-Brown stated categorically that there were no Carrion Crows in Sutherland, but later (1878) reported that one had been shot in Dornoch in 1848, and St John (1848) saw a mixed pair in the south-east. The Carrion Crow is now fairly common in the south-east corner (D. MacDonald estimates that about 10% are Carrion) and mixed pairs are found as far north as Lairg.

Rook *Corvus frugilegus*. In the south and east the sites of the rookeries have varied somewhat over the years but the numbers remain much the same. In the north, rookeries were established at Tongue in 1855, and at Kirkton, Bighouse, in 1860, and both built up to over 500 nests (Harvie-Brown and Buckley 1884). In the 1946 survey (figures from James Fisher) there were 120 nests at Tongue and 121 at Kirkton. The Tongue rookery has been much disturbed by shooting and tree-felling, and in 1958 when I last counted it there were only 13 nests, while the Kirkton rookery has now been deserted for many years.

Jackdaw *Corvus monedula*. Was not listed by Selby but was said to be found "sparingly" at Tongue in 1884 and not inland or in the west (Harvie-Brown and Buckley). It has now increased on the north coast and is also much more common inland. It breeds at the Mound and at several places in Rogart, and I saw Jackdaws at Elphin in July 1958. It is however still rare on the west.

Magpie *Pica pica*. Was common in the south-east until 1870, but 56 were killed at Dunrobin between 1873 and 1880 (Harvie-Brown and Buckley 1884); there was still a pair in the Uppat Woods in 1896, and it was still not uncommon between Invershin and Rosehall in 1887. It is not known when the Magpie re-appeared, but nine or ten pairs were shot around Dunrobin between 1916 and 1918. It was becoming scarce by 1920 but was not finally exterminated until 1923. It remained extinct throughout the county until about three years ago when a single bird appeared near Dornoch, and I was told that two were shot at Skibo in 1947 or 1948.

Chough *Pyrrhocorax pyrrhocorax*. The last Choughs to be seen in Sutherland were at Durness in 1848 (St John).

Great Tit *Parus major*. Was not recorded by Selby or Milner; St John (1848) brackets all tits together as "occur throughout the year," but this statement is valueless. In 1892 Buckley, who then lived in Sutherland, wrote "I have not seen this species myself" but later (1897) recorded one at Kintradwell in December 1895, and at Spinningdale in December 1896. These are the only two confirmed records of Great Tits in Sutherland prior to 1900. One was seen at Inchnadamph in June 1902, and in 1904 it was still "rare anywhere north of the Kyle of Sutherland" (Harvie-Brown and Macpherson). The next we hear of them is in 1929 when several were seen in Lairg and in Strath Oykell (Baxter and Rintoul), but now there is scarcely a wood in the county from Bonar Bridge to Loch Eriboll where Great Tits are not found. They were breeding in Tongue in 1947 when I first went there, and I have seen them in Glen Cassley, Strath Naver, Loch a'Choire, Scourie, Loch Assynt, and one even on the Cape-side of Durness, so this spectacular colonisation has taken place in less than fifty years. A sudden colonisation of north Norway in the past thirty years by the Great Tit, which now breeds at 70°30'N, has been described by Haftorn (1957). The spread north is obviously not due to the spread of plantations, but is correlated by Haftorn with changes in the winter climate.

Blue Tit *Parus caeruleus*. Recorded at Rosehall by Selby (1836). St John again is quite vague. Harvie-Brown (1887) gives it as rare and local in the west; in 1929 it was not seen in the west by Baxter and Rintoul, but was recorded by them (1953) in Lochinver in 1939. It is now common in the south and east, also at Tongue and Eriboll, and occurs in the west at such places as Scourie, Kinlochbervie, Rhiconich and Lochinver.

Crested Tit *Parus cristatus*. Has spread north in Ross-shire and has now reached Sutherland, where it was first recorded near Dornoch in October 1956 (MacDonald 1957), and since then I saw one near Golspie in February 1961, and D. MacDonald has seen another one near Dornoch in June 1961.

Long-tailed Tit *Aegithalos caudatus*. Not recorded by Selby or Milner. St John says it is found "throughout the year," but again gives no localities, and Harvie-Brown in 1875 listed it from Dunrobin, and said it was common in the east in his 1884 list. In 1887 it had been observed at Tongue (Harvie-Brown and Buckley), but there was no record from the west apart from an unconfirmed one from Loch Assynt in 1902 (Harvie-Brown and Macpherson 1904). Now it is widespread though not plentiful in the east, scarce but regular in Tongue, and has been confirmed as breeding in Strathnaver, and Lochinver, and recorded from Scourie.

Blackcap *Sylvia atricapilla*. Winter records are not infrequent as far back as November 1871 (Dunrobin Museum), but the first spring record was of a male at Borgie, Tongue, in May 1951 (*Scottish Naturalist* 64: 54). The Hon. G. L. Charteris heard one singing at Dunrobin on 6th June 1958 and one (sex not stated) was reported from Lairg on 9th August 1959 (*Scottish Birds* 1: 206). These few records in themselves may appear to be of little significance, but it is interesting to note that the two following species of warbler were first recorded at almost the same time.

Garden Warbler *Sylvia borin*. Never recorded prior to 1951 when one was heard singing at Strathbeg, Eriboll, on 8th and 14th June (Fitter 1951). Other records are, near Scourie 11th June 1954 (Pennie 1954), Scourie 12th June 1955 (Meiklejohn and Stanford 1956), and one singing at Altnaharra on 7th and 10th June 1960.

Chiffchaff *Phylloscopus collybita*. Selby commented on its absence. There is no record prior to 1952 when one was heard singing at Skibo on 7th June (MacDonald 1952). Since then there have been five spring and summer records of singing birds published in *The Scottish Naturalist* and *Scottish Birds.*

Wood Warbler *Phylloscopus sibilatrix*. Selby traced the Wood Warbler as far north as Dingwall in 1834, but the first to be seen in Sutherland was in Glen Cassley in 1875 (Buckley 1882); it was next recorded in Kildonan in 1876 (Clifton 1876), and it was said to be common at Dunrobin in 1877. Records from further north did not come until much later; Loch Hope 1913 (Brooksbank 1913), Loch Shin 1929 (Baxter and Rintoul 1929), Loch Naver and Tongue 1949 (Pennie 1950), and Loch Eriboll 1951. In Norway the Wood Warbler was unknown until it made its appearance at Larvik in 1877, but since 1900 there has been a great increase and spread north (Haftorn 1958). It may be noted that there is less than one degree of a difference between the latitudes of Kildonan and Larvik.

Goldcrest *Regulus regulus*. Not recorded by Selby or Milner. St John says "numerous throughout the year," and Harvie-Brown in 1875 said "all parts where fir-woods," but amended this in 1904 to "occasional in autumn only in the west, but will probably be found breeding in the Lochinver plantations." It is now plentiful wherever there are plantations, including Lochinver and Scourie, and in 1961 I found a pair feeding young in a birch and alder wood at Tongue over a mile from the nearest conifer, and heard a male singing in a birchwood at Loch Loyal.

Tree Pipit *Anthus trivialis*. Was first recorded at Inchnadamph in 1868 (Harvie-Brown 1868); bred at Glenrossal (Glen Cassley), 2 pairs in 1875, and numerous there by 1886. In 1903, not uncommon at Loch Assynt (Harvie-Brown and Macpherson 1904), and at Loch Brora in 1892 (Buckley), but occasional only at Tongue in 1884 (Harvie-Brown and Buckley). The Tree Pipit is now common in practically every mature birchwood in the county right up to Loch Eriboll, where it was noted as plentiful in the Strath Beg woods in 1960 and 1961; it is also plentiful in Glen Golly and particularly so at Loch a'Choire. This expansion of range cannot be due to change in land use as the Tree Pipit is almost confined to the birchwoods. It has also increased in number and expanded its range in Norway in recent years (Haftorn 1958).

Starling *Sturnus vulgaris*. Selby found it breeding in the north and west in 1834, and St John lists it as widely distributed, but most plentiful on Handa, although Harvie-Brown and Buckley (1884) say it was rare before 1870, and still confined to the coast line. A pair at Balnacoil in 1879 seems to have been the first inland breeding record, and in October 1888 Buckley (1892) noted with astonishment a flock of thirty on the roof of a house near Badanloch. The Starling has spread a great deal since then but still has not reached every outpost in Sutherland. They appeared at Gobernuisgeach in 1960 for the first time; occasional non-breeders only have so far been seen at Loch a'Choire, but they are breeding at Bowside, Strathy.

GREENFINCH *Chloris chloris*. Was not listed at all by Selby or Milner. St John says "common" with no qualifications. Harvie-Brown and Buckley (1867, 1884, 1887) say it is not numerous, probably confined to the south-east, rare at Tongue, and rare or absent in the west, while Harvie-Brown and Macpherson (1904) say that it is a winter visitor only to the west, and does not breed. The Greenfinch is now plentiful in all suitable places in the south and east, and also on the north coast as far west as Durness. It is less plentiful in the west, but breeds regularly in Lochinver and probably at Lochmore.

GOLDFINCH *Carduelis carduelis*. Two pairs are said to have bred in the garden of Skelbo House in 1758 (Anon. 1961). St John stated that it was "only seen in some of the gardens and orchards in the south" and Harvie-Brown and Buckley (1884) say that it "has bred at Dornoch but is apparently rarer than in 1848." A pair was seen by James Wilson, who was a member of Selby's party, in a birchwood on Loch Loyal side, but it was not seen by Selby himself who did not include it in his list. The Goldfinch certainly disappeared as a breeding species at an early date, but several have been seen in winter in the past few years between Dornoch and Golspie.

REDPOLL *Carduelis flammea*. There is considerable inconsistency among the records. Selby says "found wherever there is birch," referring to the west, but Milner did not record it at all in the centre or north; Harvie-Brown does not record it in his 1875 list of breeding birds, but both he and Buckley later list it as common on the east though not recorded on the north and west. Recently it has been recorded as breeding since 1928 in Strathnaver, Tongue, Strath-Halladale and Lochinver (Baxter and Rintoul 1929, Oldham 1935 (1)), but in my experience it is irregular and variable in all these places, though very common in some years, and this may account for the discrepancies in the old records.

BULLFINCH *Pyrrhula pyrrhula*. Was not recorded by either Selby or Milner. St John says "common" and Harvie-Brown and Buckley (1887) "not common, more abundant in the east than in the west, once recorded in Tongue." Now quite plentiful in the south and east, and less so, though regular, at Lochinver; less plentiful in the north, but has been recorded in recent years at Tongue, Eriboll and Strathnaver.

House Sparrow *Passer domesticus*. Was seen by Selby in all the villages and was also said by him to be common in the thatch at Keoldale House, but according to Harvie-Brown and Buckley (1887) the Tree Sparrow was the commoner at Scourie and Rhiconich in the 1880's, and the House Sparrow was rare at Durness. The House Sparrow is now plentiful at practically every habitation in the county, breeding at Kearvaig and at the Cape Wrath Lighthouse, and also at Lone in the Reay Forest. They arrived at Gobernuisgeach only within the last two or three years, but have already ousted the House Martins which bred there for many years. They breed at Badanloch but so far have not managed to reach Loch a'Choire. There has been a corresponding spread of the House Sparrow in north Norway in recent years and it seems that they have been enterprising enough to be carried by ships to some of the towns and villages in East Finnmark (Lund 1956).

Tree Sparrow *Passer montanus*. The first known in the county were those which commenced breeding in Dornoch in 1872 (Harvie-Brown 1875), and they were also recorded from Helmsdale from 1880 (Harvie-Brown and Buckley 1884). The Tree Sparrow was commoner than the House Sparrow in the Scourie/Rhiconich area from 1880 onwards, and there were still considerable numbers at Scourie and Tarbat in 1901 and 1902 (Harvie-Brown and Macpherson 1904). A few pairs still breed in Dornoch, where they nest in the undercarriage of Rooks' nests, but as far as I am aware there is none nesting elsewhere in the county, although an unconfirmed report suggests that there may be one or two left near Laxford Bridge.

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REVIEW OF ORNITHOLOGICAL CHANGES IN SCOTLAND IN 1961

JAMES W. CAMPBELL

Introduction

This is the ninth report of the Scottish Bird Records Committee, and it is concerned with records *published* during 1961. The following journals have been searched: *Scottish Birds* (*S.B.*); *British Birds* (*B.B.*); *Bird Migration* (*B.M.*); *Fair Isle Bird Observatory Bulletin* (*F.I.B.O.B.*); *Ibis*; *Bulletin of the British Ornithologists' Club* (*Bull.B.O.C.*); *Scottish Field; The Field*; *Bird Notes* (*B.N.*). The abbreviations used in this report are shown in brackets.

There has been one change in the membership of the Committee since its constitution was detailed in our seventh Report (*S.B.* 1: 254), Mr A. T. Macmillan having been appointed in 1961 in place of Commander Sir Geoffrey Hughes Onslow, who has resigned. Previous reports have been published in *The Scottish Naturalist* 1955: 98; 1956: 1; 1957: 37, 170; and *Scottish Birds* 1: 30, 117, 253, 443.

As on previous occasions, some records have been held over for further consideration.

BIRDS NEW TO AREAS AND COUNTIES

WHITE-BILLED DIVER *Gavia adamsii*. One, Fair Isle, 14th May 1961 (*B.M.* 2: 53, and *F.I.B.O.B.* 4: 181); first for Fair Isle.

RED-NECKED GREBE *Podiceps griseigena*. One, shot lower reaches of River Beauly, 23rd March 1960 (*S.B.* 1: 286); first for East Inverness.

MANX SHEARWATER *Procellaria p. puffinus*. One, Loch Tay, 23rd July 1961 (*S.B.* 1: 450); first for North Perth.

LITTLE EGRET *Egretta garzetta*. One. Firth and Rendall area, during July 1961 (*B.N.* 30: 30); first for Orkney.

GREEN-WINGED TEAL *Anas crecca carolinensis*. Adult drake, Gladhouse Reservoir, 21st October 1961 (*S.B.* 1: 490); first for Forth and Midlothian.

GARGANEY *Anas querquedula*. One, Barr Loch, 26th May 1959

(*S.B.* 1: 387); first for Renfrew.

VELVET SCOTER *Melanitta fusca.* Ten, Loch Ewe, 30th March 1961 (*S.B.* 1: 433); first for North-West Highlands and Wester Ross. One, Village Bay, 27th July 1961 (*S.B.* 1: 491); first for St Kilda.

EUROPEAN WHITE-FRONTED GOOSE *Anser a. albifrons.* Two, Endrick mouth, in November 1960 (*S.B.* 1: 385); first record of eastern race for Dunbarton.

BEAN GOOSE *Anser a. arvensis.* Eight, near Carnwath, 16th April 1961 (*S.B.* 1: 463); first for Lanark.

SNOW GOOSE *Anser caerulescens.* One Lesser *Anser c. caerulescens,* Libberton, 8th March 1960 (*S.B.* 1: 273); first record of this race for Lanark.

One Greater *Anser c. atlanticus,* Hule Moss, 13th (not 9th) November 1960 (*S.B.* 1: 425); first for Tweed and Berwick. In both cases, the possibility of these birds being escapes cannot be discounted (*B.B.* 54: 182).

GOLDEN EAGLE *Aquila chrysaëtos.* One, Fair Isle, 7th April 1961 (*B.M.* 2: 53, and *F.I.B.O.B.* 4: 181); first for Fair Isle.

MARSH HARRIER *Circus aeruginosus.* One, near Thurso, 5th March 1961 (*S.B.* 1: 426); first for North Coast and Caithness.

HEN HARRIER *Circus cyaneus.* One, Delnies Moss, 16th March 1961 (*S.B.* 1: 431); first for Nairn.

GYR FALCON *Falco rusticolus.* One, Endrick mouth, 5th November 1960 (*S.B.* 1: 378); first for Dunbarton and West Stirling.

RED-FOOTED FALCON *Falco vespertinus.* One, near Boat of Garten, 15th May 1961 (*S.B.* 1: 451); first for Moray area and East Inverness. One, Hule Moss, seen 8th October and found dead 15th October 1961 (*S.B.* 1: 492); first for Berwick.

TURNSTONE *Arenaria interpres.* One, Lake of Menteith, 21st May 1960 (*S.B.* 1: 387); first for South Perth.

BAR-TAILED GODWIT *Limosa lapponica.* One, Stirling bank of Endrick mouth, 22nd April 1961 (*S.B.* 1: 464); first for West Stirling.

WOOD SANDPIPER *Tringa glareola.* One, Endrick mouth, 21st May 1961 (*S.B.* 1: 498); first for West Stirling.

ICELAND REDSHANK *Tringa totanus robusta.* One, found dead, Tyninghame, 16th October 1960 (*S.B.* 1: 384); first record of this race for East Lothian.

SPOTTED REDSHANK *Tringa erythropus.* One, Foula, 1st September 1959 (*B.M.* 1: 146); first for Shetland other than Fair Isle.

LITTLE STINT *Calidris minuta.* Three, Invergowrie Bay, 26th September 1960 (*S.B.* 1: 384); first for North Perth. One, Cambus, 28th August 1961 (*S.B.* 1: 467); first for Clackmannan. One hundred and six, Findhorn Bay, 18th September

1960 (*S.B.* 1: 333); first for Moray.

SANDERLING *Crocethia alba.* Three, Kingoodie, 12th May 1957 (*S.B.* 1: 387); first for North Perth.

LITTLE GULL *Larus minutus.* One, Barr Loch, 7th May 1961 (*S.B.* 1: 464); first for Renfrew.

COLLARED DOVE *Streptopelia decaocto.* One, Kinloch, Rhum, 5th May 1960 (*S.B.* 1: 379); first for Inner Hebrides. One, Stornoway, 2nd June 1960 (*S.B.* 1: 379); first for Outer Hebrides. One, near Dumfries, 31st May 1961 (*S.B.* 1: 482); first for Solway and Dumfries. A pair, Coldingham, May 1961 (*S.B.* 1: 482); first for Tweed and Berwick. Two, Edmonstone, in autumn 1960 (*S.B.* 1: 484); first for Midlothian. One, St Andrews, mid-May 1961 (*S.B.* 1: 486); first for North Fife. One, Old Aberdeen, 5th June 1960 (*S.B.* 1: 487); first for Dee and Aberdeen. One, Dell Hotel, Rothiemurchus, 2nd July 1961 (*S.B.* 1: 488); first for East Inverness. One, Hamnavoe, West Burra, 31st May 1961 (*S.B.* 1: 488); first for Shetland other than Fair Isle.

WHITE-BREASTED BARN OWL. *Tyto a. alba.* One, Isle of May, 24th June 1961 (*B.M.* 2: 54); first record of this race for Isle of May.

LITTLE OWL *Athene noctua.* One, found dead, Leith, 17th March 1961 (*S.B.* 1: 453); first for Midlothian.

TENGMALM'S OWL *Aegolius funereus.* One, Cruan, Firth, 26th December 1959 (*S.B.* 1: 453); first for Orkney.

HOOPOE *Upupa epops.* One, Howden Haugh, 17th April 1961 (*S.B.* 1: 427); first for Selkirk.

GREAT SPOTTED WOODPECKER *Dendrocopos major.* One, Loch Leven, 28th October 1961 (*S.B.* 1: 497); first for Kinross.

JAY *Garrulus glandarius.* One, Glen Dye, 15th June 1961 (*S.B.* 1: 460); first for North Kincardine.

CONTINENTAL SONG THRUSH *Turdus p. philomelos.* Two, Gladhouse, 29th October 1961 (*S.B.* 1: 507); first record of this race for Midlothian.

GARDEN WARBLER *Sylvia borin.* Considered to be "reasonably common," east end Gartmorn Dam, and towards Dollar and Tillicoultry (*S.B.* 1: 498); first for Clackmannan. Two, heard and seen, Blackhall near Banchory, 26th May 1961 (*S.B.* 1: 498); first for North Kincardine.

CHIFFCHAFF *Phylloscopus collybita.* One, heard, Blackhall near Banchory, 28th May 1961 (*S.B.* 1: 498); first for North Kincardine. One, Orton, 26th May 1960 (*S.B.* 1: 339); first for Moray.

[ARCTIC WARBLER *Phylloscopus borealis.* One, Isle of May, 26th August 1960 (*S.B.* 1: 356); first for Isle of May. This record was subsequently withdrawn (*S.B.* 2: 18).]

YELLOW-BROWED WARBLER *Phylloscopus inornatus.* One, near Buchlyvie, 6th November 1960 (*S.B.* 1: 380); first for East Stirling.

Great Grey Shrike *Lanius excurbitor.* One, mid-November 1960, in Skye (*S.B.* 1: 387); first for Skye. One, between Fort William and Spean Bridge, 26th March 1961 (*S.B.* 1: 464); first for South Inverness.

Lesser Grey Shrike *Lanius minor.* One, between Crosshill and Dalrymple, 15th June 1961 (*S.B.* 1: 455); first for Clyde and Ayr.

Siskin *Carduelis spinus.* Four, Loch Leven, 28th October 1961 (*S.B.* 1: 508); first for Kinross.

Redpoll *Carduelis flammea.* Six, Loch Leven, 6th February 1954 (*S.B.* 1: 508); first for Kinross.

Red-headed Bunting *Emberiza bruniceps.* One, Isle of May, 28th-29th August 1960 (*B.M.* 1: 251); first for Forth and Isle of May. Probable escape.

FIRST BREEDING RECORDS FOR AREAS AND COUNTIES

Teal *Anas c. crecca.* Nest with eggs, Isle of May, 15th May 1960 (*S.B.* 1: 358); first breeding for Isle of May.

Whimbrel *Numenius phaeopus.* Bred in undisclosed area, Sutherland, 1960 (*S.B.* 1: 427); first breeding for South-East Sutherland.

Herring Gull *Larus argentatus.* Nest with eggs, Loch Leven, 28th May 1961 (*S.B.* 1: 459); first breeding for Kinross.

Black-headed Gull *Larus ridibundus.* Nesting colony found near Lochinver, 25th June 1961, had evidently existed for some years (*S.B.* 1: 497); first breeding for West Sutherland.

Sandwich Tern *Sterna sandvicensis.* Pair bred Whalsay in 1955 (*S.B.* 1: 494); first satisfactory breeding for Shetland.

Collared Dove *Streptopelia decaocto.* Nest and eggs found Coldingham, June 1961 (*S.B.* 1: 483); first breeding for Tweed and Berwick. Nested near Craigmillar, summer 1961 (*S.B.* 1: 484); first breeding for Midlothian.

Green Woodpecker *Picus viridis.* Nest found Dumfriesshire, May 1960 (*S.B.* 1: 379); first breeding for Solway and Dumfries. Nest found near East Kilbride, 28th May 1961 (*S.B.* 1: 454); first breeding for Lanark.

Stonechat *Saxicola torquata.* Nest with young at Voe, Delting, 10th May 1961 (*F.I.B.O.B.* 4: 198); first breeding for Shetland.

The following are included for general information:

Dowitcher *Limnodromus* spp. The *British Birds* Rarity Records Committee have examined occurrences of the Dowitcher in Great Britain (*B.B.* 54: 343) and have assigned the Scottish records as follows:

1. Long-billed Dowitcher *Limnodromus scolopaceus*. Specimen obtained Largo, Fife, September 1867 (Gray. 1871. *The birds of the west of Scotland*, p. 314).
2. Unidentified specimens. One, Crinan, Argyll, 2nd September 1891 (Harvie-Brown and Buckley. 1892. *A vertebrate fauna of Argyll and the Inner Hebrides*, p. 177).
3. Indeterminate sight-records. One, Hule Moss, Berwick, 20th-30th September 1958 (*S.B.* 1: 34, 76, 256). One, Gullane Point, East Lothian, 29th September 1960 (*S.B.* 1: 330, 444). One, Hamilton, Lanark, 8th-12th October 1960 (*S.B.* 1: 330).

Redpoll *Carduelis flammea* (?)*rostrata*. Pair with nest containing young, Spey Valley, East Inverness, May 1959 (*B.B.* 54: 251). Description and photographs of adults show characters of north-western type of Redpoll. Williamson (*B.B.* 54: 241) discussing the race involved, concluded that "whilst there cannot be absolute certainty, there is extremely high probability that the Scottish breeding pair belonged to the Greenland low-arctic form"—*i.e. rostrata*.

The following records, mostly held over from previous years, are still awaiting the decisions of the *British Birds* Rarity Records Committee:

Pelican *Pelecanus* sp. (*B.M.* 1: 251).
Frigate Bird *Fregata* sp. (*B.B.* 53: 455).
White Stork *Ciconia ciconia* (*S.B.* 1: 451).
Baikal Teal *Anas formosa* (*Bull B.O.C.* Sept. 1958).
Western Sandpiper *Calidris mauri* (*Popular Handbook of Rarer British Birds*, p. 49).

SHORT NOTES

FOOD AT A BUZZARDS' NEST

In 1962 I had a unique opportunity of making daily visits to a Buzzards' nest which was built in a sloping ivy-draped oak tree leaning out over a steep river bank about half a mile from my house. It was actually an old Buzzards' nest which had been renovated after having been untenanted for at least 10 years.

The nest was first seen to be occupied on 25th May when it held two chicks, judged to be about two days old, and an unhatched egg which later proved to be addled. A hide was built 33 feet from the nest and daily visits were thereafter

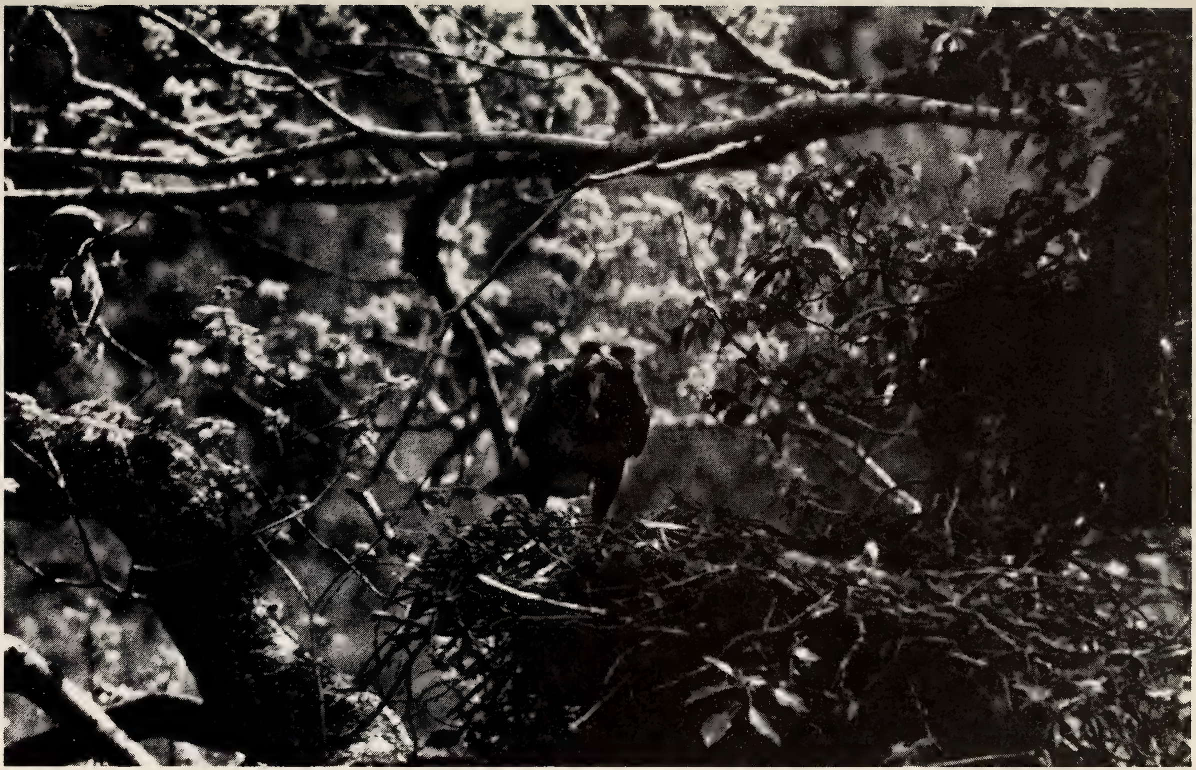

PLATE 11. Pair of BUZZARDS at nest, Fort Augustus, Inverness-shire, 31st May 1962, the cock with a vole, and the hen bringing in a spray of oak (see opposite). *Photograph by L. MacNally*

made for the purpose of observing the prey brought in. On 8th June it was noted that the elder chick was able to pick small shreds from a rabbit lying in the nest, and it savagely repulsed the younger chick when it attempted to do the same. During the following week this aggressiveness became more pronounced, even when there was plenty of food at the nest. On the morning of the 15th the younger chick was looking very seedy, its head criss-crossed with red cuts presumably inflicted by the elder chick, and by 6 p.m. of the same day it was dead, surrounded by an abundance of food. The elder chick fledged some time between 5 p.m. on 6th and 8 a.m. on 7th July.

During this period the nest was visited on 43 consecutive days and the following items of prey were identified at the nest:

Rabbit—32
Mole—19
Frog—5 (3 of which were brought in alive)
Vole—4 (these are eaten very quickly and evidently formed a larger part of the diet than this figure suggests)
Birds—8 (1 Snipe, the remains of a Black-headed Gull, possibly picked up from a fox's den, 1 young Cuckoo, 2 fledgling Song Thrushes, 2 fledgling Robins and 1 fledgling Dipper)

On five occasions carrion (in each case parts of a lamb) was found at the nest—lamb's wool; the hind-leg of a Black-face lamb, with the thigh-bone broken across by the teeth of a fox or dog; some piece of decomposing offal; the odorous foreleg of a Black-face lamb; and the fresh pelvic bone and attached backbone of a lamb, with the ribs chewed to stumps by a fox. These remains had probably all been taken from a fox's den on the opposite side of the valley, where lamb remains were much in evidence.

The live frogs were a rather surprising discovery in the nest. On two occasions these were found crouching underneath a chick. I touched one of the frogs and it gave a galvanic leap over the edge of the nest and out into space! These frogs were perforce eaten alive by the chicks, although they seemed to prefer furred prey, voles being apparently a prime favourite, followed by rabbits and then moles. Small prey was brought to the nest in the beak; moles and rabbits in the talons. The male bird was the chief food provider, while the female stayed in the area on guard. She was also the only one of the two that I saw bringing in sprays to the nest (see Plate 11).

L. MacNally.

LITTLE AUK IN SUMMER IN SOUTH-EAST SUTHERLAND

During the lunchtime break on 14th June 1962 a schoolboy brought me a Little Auk which he had found squatting beside a wall in his garden at Dornoch. Except for a few lightish specks on the otherwise black breast the bird was in full summer plumage. At first it was very lively, running away with remarkable speed when released, but by evening it had become much weaker. All attempts to feed the bird were unsuccessful and by next morning it had died. The *Handbook* (5: 167) gives only one June record. There was a strong south-east to south-west wind in the area on the night of 13th/14th June.

D. MACDONALD.

COLLARED DOVES IN DUMFRIESSHIRE

On 13th March 1962 when driving through private grounds some three miles from Dumfries I disturbed a bird which I thought must be a Collared Dove. I returned the following day with R. T. Smith, and almost at once a dove flew down from a tree to join some domestic Fan-tailed Pigeons feeding on the roof of a farm out-building. We had excellent views at about 25 yards, and saw the black half-collar and very dark primaries plainly. The underparts were paler than the upperparts and breast, and the tail showed white when the bird flew. On the 13th I had heard a second bird calling while I was looking at the first, and on making further enquiries at the farm we were told that the doves had first appeared about three years previously, soon after the pigeons were acquired. They had evidently nested successfully nearby because at least one young bird had fed on the roof with the old birds, but no nest had been found. It is likely that it was one of these birds which W. Austin recorded in the area on 31st May 1961 (*antea* 1: 482).

H. M. RUSSELL.

(Formal proof of breeding was added on 10th April 1962, when W. Austin found two adults on the ground with a nestling which had evidently fallen from the nest. This is the first breeding record for the Solway Faunal Area.—ED.).

CURRENT NOTES

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Unless otherwise stated, all dates refer to 1962).

Distribution

This section is confined to 1962 records, and earlier observations are included only in amplification of such records. In principle we dislike publishing out-of-date notes of a minor nature, and these have been relegated to another section.

In the present section we have tried to include a picture of arrival dates—though not attempting any serious correlation with the weather charts, which we leave to others—but we would enter a plea that readers do not now send in lists of 1962 arrival dates to prove us wrong, as it is too late to make any use of them.

The data which we have been able to collect show clearly the way in which many of the early summer visitors, such as Swallow, Sand Martin, Ring Ouzel, Wheatear and Chiffchaff, were held up for a fortnight or so, whereas the second-wave birds, such as House Martin and Willow Warbler, were only slightly late, and the late birds, such as the Swift, were scarcely affected. The big break through came about 20th to 24th April, with many interesting observations on Sunday the 22nd, though the great rush of Robins at the Bass Rock which started on the 17th indicates that birds were on the move before the 20th.

The remains of a **Red-throated Diver** found inland at Wamphray, Dumfriesshire, on 5th May had evidently lain there for several months (RWA, ED).

A **Great Crested Grebe** was seen on the sea at Barnbougle, West Lothian on 2nd June—an unusual date (TCS). A **Red-necked Grebe** was in Pease Bay, Berwickshire, on 21st April (MJH, DGL), and there were two at Gullane Point, East Lothian, next day (DGA, DJ, TCS). In 1961 a pair of **Black-necked Grebes** visited Kilconquhar Loch, Fife, on 8th April (*antea* 1: 462), and this year a pair was seen on 13th April, no less than three pairs next day, and the last (3) on the 28th and 29th (PGB, RSW).

A **Leach's Petrel** was found in the middle of Perthshire on 19th May at Invervar in Glen Lyon (CDM). Its identity was confirmed by GW who tells us that another was picked up in Speyside about the same time, and suggests that both may have come in with severe westerly gales on the 16th and 17th. We have received no details of the Speyside bird. **Fulmars** do not breed in Bute, though one was seen in 1946 (*The Fulmar* p. 229). On 21st May, two—or perhaps a single bird twice—flying along the cliffs near Garroch Head, may have been prospecting (WW). In recent years Fulmars have been seen about Inchgarvie, under the Forth Bridge, and even sitting on the cliffs, but no proof of breeding could be found until this year, when two eggs were seen on 27th June (RWJS). A Fulmar flew over the Braid Hills in Edinburgh on 16th June (GLS).

An exhausted **Gannet** standing by the Loch o' the Lowes, New Cumnock, Ayrshire, on 12th April, was dead next day. It may have been the same bird reported the previous week in the Nith valley, and perhaps came inland with gales early in the month (JAB). Over 200 **Gannets** flew SW past Corsewall Point Lighthouse, Wigtownshire, between 1000 and 1100 hrs on 22nd April, and were probably on their way from Ailsa Craig to feed in the Irish Sea (AFA). At Castle Loch, Mochrum, Wigtownshire, it was estimated that about 100 pairs of **Cormorants** were nesting in this old colony on islets in the loch on 24th April (AFA).

In Edinburgh the first brood of **Mallard** appeared on Duddingston earlier than expected—on 27th April, although the loch was not free of ice until 19th March. This compares with first broods on 23rd April 1960 and 17th April 1961 (DRA). A drake **Garganey** was seen on a loch near East Linton, East Lothian, on 29th April, but there is no evidence of breeding (CNLC, KSM). The count of 136 **Pintail** at Inverness (*antea* 2: 45) evidently refers to a regular flock which winters off Alturlie Point. Numbers on the Lentran side of the Beauly Firth, at the one place where Pintail may be seen regularly, are much smaller, with a maximum of 20 or 30 birds (MR). Off Piltanton Burn Sands, Luce Bay, Wigtownshire, counts of Pintail on 24th February, 17th March and 7th April gave totals of 400, 250 and 100 respectively (AFA). Six at Tyninghame, East Lothian, on 18th March is unusually many for this part of the Forth (RWJS). At Montrose (see *antea* 2: 45) 45 were still present on 10th April (HB). A **Shoveler** off Eagle Rock, West Lothian, on 29th April was the first the observer has seen in the Almond Estuary (TCS).

Five **Scaup** were seen on 22nd April off Gullane Point, where the species is surprisingly scarce considering the numbers a few miles up the Forth at Leith (DGA, DJ, TCS). A flock of 40 was still at Carsethorn, Kirkcudbrightshire, on 18th May (HB). In Glasgow a pair of **Pochard** was at Hilda Marshes on 7th April and 8th May, and the drake was often seen until 22nd May, though there was no evidence of breeding (WW). On various Scottish lochs **Goldeneye** regularly linger into the first or second week of May. Late birds are reported from L. Ken, Kirkcudbrightshire, where a drake and a duck were seen on the 24th (HB), and Barr Loch, Renfrewshire, where a single bird was seen on 27th May and 2nd June (GHA, GLAP, LAU). Three **Long-tailed Ducks** were in L. Ryan, Wigtownshire, on 21st April (RS). The species is much less common in the south-west than on the east coast of Scotland.

Single "redhead" **Smews** were on the Lake of Menteith, Perthshire, on 1st April (GHA, ME, GLAP), and Barr Loch, Renfrewshire, on the 29th (LAU). A **Shelduck** was noted inland at Balgray Dam, Renfrewshire, on 18th March (DL, AMcC, AW).

A **Grey Lag Goose** off Eagle Rock on 14th April seems to be the first published record for West Lothian (TCS). There are a number of records of late, or in some instances possibly "pricked," Grey Lags. At Kingoodie there were 13 on 3rd May (HB); three at Gadloch, Lanarkshire, on the 11th were gone next day (WW); two at Barr Loch, Renfrewshire, on 2nd and 6th June had gone by the 16th (GHA, GLAP), but two on the Lake of Menteith on 3rd June (MFMM) were still there on the 10th (GHA). Most of the **White-fronted Geese** on Islay are of the Greenland form *flavirostris,* but flocks of about 40 European Whitefronts *Anser a. albifrons* were noted near Bridgend at the end of March (GW, MIW), and at Cornabus on 4th April (JMu). **Bean Geese** are now very unusual in Islay, where 15 were seen on 2nd April and five in the same area on the 5th (JMu). One thousand **Pink-footed Geese** flew N over Gifford, East Lothian, on 14th April (IH). At the Loch of Strathbeg, Aberdeenshire, 900 were still present on the 25th (ETV), and there were, as with the Grey Lags, quite a number of late Pinkfeet reported. In May there were still 28 at Libberton, Lanarkshire, until the 6th (RE-H), 47 at Kingoodie on the 7th (HB), and one at the mouth of the R. Endrick, L. Lomond, on the 27th (GHA). On 2nd June one was reported on Canna, Inverness-shire (WW), and on the 3rd there were five at the Lake of Menteith (MFMM), where two remained on the 10th (GHA).

During the winters of 1959/60, 1960/61 and 1961/62 a white **Snow Goose** was reported at various places in the lowlands, most frequently at Libberton, Lanarkshire (*antea* 1: 272, 386, 425). There can be no real doubt that all these reports refer to the same bird. There is no overlap of dates, and as it was a most outstanding bird—witness the fact that WB picked it up at nearly three miles range in a flight of over 1,500 Pink-footed Geese—it would not be easily overlooked. It was always with Pinkfeet, and in fact last autumn arrived with them (*antea* 1: 501). Those observers who saw it well agreed that, both on the ground and in the air, it was appreciably larger and heftier than the Pinkfeet, and that compared with the Lesser Snow Geese at Libberton it had a much heavier bill and comparatively shorter tarsus (WKR *et al*). Save only for the fact that the white Lesser Snow Goose which escaped in Dumfriesshire in February 1958—a first year bird—was exceptionally large (*antea* 1: 274), one would have no hesitation in recording this bird as a Greater Snow Goose *A. c. atlanticus;* if it is ever possible to tell white Lessers from Greaters in the field this must be a Greater. Yet this would rule out a possible explanation put to us by WKR—that the white, and one of the blue, Lesser Snow Geese which escaped in 1958 might have bred beside the Pinkfeet in 1959 and reared the juvenile blue bird seen at Libberton the following winter. Snags to this theory include the absence of any Snow Geese in the winter of 1958/59, the absence of any further immatures, the independent behaviour of all three birds in 1960, as well as the great bulk of the white one.

In the winter of 1961/62 the supposed Greater Snow Goose was first seen flying with three Pinkfeet down the Dewar Burn, into Peeblesshire, at 1.15 p.m. on 13th October—a day when great numbers of Pinkfeet were arriving in the Lothians and moving south (per WB). At 3.30 p.m. it was seen landing with Pinkfeet at Caerlaverock, Dumfriesshire—a very neat tie-up. It frequented Lochar Moss during the subsequent week, and there was a report of it from Collin, also near Dumfries, in early November (ELR). It then apparently returned to Midlothian, roosting at Gladhouse at least from 11th November to 2nd December (DGA, RWJS). Just after this there was a southward movement of local geese and an arrival of others from further north. The Snow Goose was back at Libberton on 14th December, and this seems to have been its main centre for the rest of the winter—though it was seen rather irregularly as it moved about a lot (RE-H). There is an unconfirmed, but evidently reliable report of it at the Peeblesshire end of Auchencorth Moss one day during the week before 27th January (per WB). On 4th, 10th, 16th, 17th, 18th, 19th and 21st February it was seen by a string of visitors to Libberton (JMSA, KCRH, CEP, WKR, GW, MIW), but on 1st March it was back at Gladhouse again, flying towards Biggar, and on the 6th near Wester Middleton, flying towards Gladhouse (per WB). On the 10th and 11th it had returned to Libberton (GHA, JRC, ME, EF, WGMH, GLAP, DRW), and it was still in that area in mid April (WKR).

Both the blue phase **Lesser Snow Geese** (or **Blue Geese**) returned to Libberton in the winter of 1961/62. The adult arrived on 13th October—the same day as the white bird flew south to the Solway and great numbers of Pinkfeet were seen—and was noted fairly regularly until 20th April, leaving during the next week while the observer was away (PGRB, KCRH, RE-H, WKR). The younger bird, last seen as a juvenile in the spring of 1960, was observed several times in February and March by WKR, and seen also by members of his adult education class. It now has a pure white head and upper neck, though considerably less white on the neck and body than the other bird. It tends not to mix with the other two Snow Geese which, for the first time, were feeding and moving about together from the middle of February. Except when the white bird went off to Gladhouse they seemed almost inseparable and gave the impression of being paired (KCRH, WKR).

A **Barnacle Goose** was seen with the Pinkfeet at Libberton, Lanarkshire, on 6th January and various dates until at least 2nd April (GHA, PGRB, ME, GLAP). Five **Canada Geese** were beside the road some miles north of Dumfries on 8th April (DL, AMcC, AW), 16 at Rowbank Reservoir on the Ayrshire/Renfrewshire border on 24th February (GHA), six at L. Thom, Renfrewshire, on 16th June (GHA), one at Duddingston Loch in Edinburgh, where it did not associate with the pinioned Grey Lags, on 4th June (DRA), and single birds at two places on Islay during the first week of April (JMu).

A surprising number of observers have reported **Whooper Swans** in May and June this year. Records come from:

Bridge of Dee, Kirkcudbright—3 adults and 1 immature on 5th May (AFA).
Loch Ken, Kirkcudbright—3 adults at N end, and 5 adults at S end on 5th May (AFA); 2 on 15th and 24th May (HB); 2 immatures on 2nd June (JGY).
Loch o' the Lowes, New Cumnock, Ayr—an adult still there on 29th June after at least five weeks residence (JAB).
Gadloch, Lanark—3 adults on 5th May, but only one on the 6th, and it was driven away on the 8th by an aggressive Mute Swan (WW).
Barr Loch, Renfrew—an immature bird on 2nd, 6th and 16th June (GHA, GLAP).
White Loch, Renfrew—3 adults on 29th and 30th June (GHA).
Endrick mouth, L. Lomond—an adult on 27th May (GHA).
S. Uist—3 adults on one loch on 7th June, and 2 on another on the 9th (WW).

Six **Bewick's Swans** were seen with Whoopers beside the R. Medwin at Carnwath, Lanarkshire, on 9th February (RE-H), and two at Barr Loch on 11th March (LAU).

An **Osprey** was seen on Unst on 14th June (KDS).

Black Grouse seem to be on the increase in the upper regions of the R. Ayr. On 6th May three groups, of ten cocks and a hen, seven cocks, and eight cocks, were noted on a run from Sorn to Glenbuck, and they have been seen regularly in the area in the past year or two. Also, whereas one used often to come through the pass from Sanquhar to Crawford without seeing any, now one may see five or six (DL, AMcC, AW). At the end of April a **Corncrake** spent 24 hours in a small garden in Newburgh, Aberdeenshire (EAG), and on 2nd June one was seen and heard in a field at Belmont, Ayrshire (RMR). In the Lothians the species seems to have virtually disappeared in the last few years.

Oystercatchers were already inland and sitting about in the fields along the Tweed on 18th February (TCS), and in the St Mary's Loch area, Selkirkshire, on the same date (JBal). At the Moorfoot reservoirs the first bird had been recorded on the 10th (DGA). Three **Ringed Plovers** were recorded on a shingle bank in the R. Clyde near Thankerton, Lanarkshire, on 11th March (GHA, ME, GLAP). A winter record of **Grey Plover** in the west is of one at Barassie, Ayrshire, on 18th February (LAU). Baldoon Old Airfield, Wigtown, is a favourite winter haunt of **Golden Plover**, but more than 1,000 on 28th March were in fact passing through (AFA). Two **Dotterel** were at Southerness, Kirkcudbrightshire, on 16th April (WA). On 9th March **Woodcock** and Oystercatchers were arriving on a rugger pitch at Haddington. It was very cold and the ground was covered with snow. The Oystercatchers continued on northwards, but the Woodcock turned back towards the R. Tyne (AMacd).

In and about the Lothians there seems to have been a substantial increase in the number of breeding **Curlews**; with only a little more effort this year it has been possible, while looking for broods of Lapwings, to ring 17 Curlew chicks, where three were ringed last year, one in 1960, and none in 1959, 1957, 1956 or 1955 (ATM). An early **Whimbrel** was on Islay on 1st April (JMu). Two were at Aberlady on 5th May (KSM, MFMM), two at Longannet, Fife, on the 19th (JH), and single birds at the mouth of the R. Endrick, Dunbarton and Stirling, on 27th May (GHA), Tayport on 1st May (HB), Morar on the 24th, Canna on 2nd June, and Sanday, the neighbouring island, on the 3rd (WW). A **Black-tailed Godwit** was at Aberlady on 25th May (ATM), two were at Cult Ness, Fife, on 1st May (GD, JP), and single birds were at Lundin Links, Fife, on 21st April (PGB), Kingoodie on 18th April

(HB), the Ythan Estuary on 11th April (EAG), and Cotehill Loch, Aberdeenshire, on the 22nd (ETV). A **Green Sandpiper** at Bell's Burn, Manderston, Berwickshire, on 21st and 22nd April was the first recorded there in April, though this is a winter locality (*antea* 2: 42) (SJC). At New Cumnock, Ayrshire, the first **Common Sandpiper** arrived on 11th April—about the usual date (JAB), and on the Tweed at Walkerburn there were three on the 21st (JBal). In the Moorfoots two were seen at the reservoirs on 15th April (DGA), and in the hill valleys the first was seen on 21st April, three pairs were noted next day, and they were generally distributed by the 25th (WB). Two were at West Saltoun, East Lothian, on the 23rd (AMacd), and two near Balerno, Midlothian, the same day (KSM). A **Spotted Redshank** was at Aberlady on 22nd April (DGA, JBd, WKB, TCS). In Lanarkshire single **Greenshanks** were noted during the winter at Quothquhan on 21st January (RE-H), and on the Clyde near Thankerton on 11th March, perhaps the same bird (GHA, ME, GLAP), and in Dunbartonshire there were two at Cardross on 25th February (GHA, ME, GLAP). In East Lothian one was seen leaving Gullane Point to the NE on 22nd April (DGA, JBd, WKB, DJ, TCS).

Away from their breeding grounds single **Great Skuas** were seen a mile offshore from Anstruther, Fife, on 21st May (CNLC, KSM, JAS), and a mile offshore from Mallaig, Inverness-shire, on the 26th (WW). Two **Arctic Skuas** were taking a short cut overland at Kilconquhar Loch, Fife, on 23rd April (PGB), and two dark phase birds were harrying the gulls near Horse Island, Ardrossan, Ayrshire, on 16th June—an unusual date (JAB). A rather seedy **Long-tailed Skua** was found sitting on the 7th green of the golf course at North Berwick, East Lothian, on 13th June. It was taken home but later died. It was thought, from its plumage, to be a third or fourth year bird (HFDE per AMacd). On 27th June members of an Edinburgh Natural History Society outing had excellent views of an adult Long-tailed Skua on the sea and chasing terns west of Inchmickery in the Firth of Forth. A second skua was probably an immature of the same species as the shape and flight action were similar (RWJS).

Herring Gulls were noted breeding on Inchgarvie in the Firth of Forth this year (RWJS). Parties of **Common Gulls** were flying NE at Haddington, East Lothian, in wet weather between 1600 and 1700 hrs on 21st April (AMacd), and a similar movement on a smaller scale was seen at Aberlady at about the same time on the following day under very much better conditions (DGA, DJ, TCS). This was perhaps spring departure as discussed by Bourne and Patterson (*antea* 2: 3-17). A pair of Common Gulls which nested at Lochside, Sanquhar, was the observer's first breeding record for upper

Nithsdale (JGY). At Loch Skene, in the Moffat Hills, on 6th June a pair of Common Gulls was flushed from the same islet which White-tailed Eagles once used, and the birds watched through binoculars as they returned and one of them very clearly settled down on a nest to incubate (DAR). These two records would seem to be the first reports of breeding in Dumfriesshire. At Dornoch, Sutherland, at least two pairs nested in a field of barley (DM).

An immature **Glaucous Gull** was seen at Ayr on 18th February (GHA, ME). Single **Iceland Gulls** were noted at various places in April, and descriptions of these birds have been sent. One was at the Loch o' the Lowes, New Cumnock, with Herring and Greater Black-backed Gulls on the 6th, and may have been blown inland by westerly gales on the 5th and 6th (JAB), one was at Longannet, Fife, on the 22nd (JH), and one at Oban with two Glaucous Gulls on the 23rd, and again on the 26th when it was watched at ranges down to two feet as it walked among the fish boxes on the quayside, or stood beside a Glaucous Gull (ME, GLAP). None of these birds was fully adult.

At Buddon Burn, Angus, 49 **Little Gulls** were counted on 24th April. Of these, 20 were 1st year birds, and the rest were adults in summer plumage—11 with their breasts and the front of their necks suffused salmon-pink (HB). An immature bird was at Barr Loch, Renfrewshire, on 6th June (GHA, GLAP). A dead **Kittiwake** was found inland at Manderston, Berwickshire, on 22nd April (SJC). A count of the colony at Dunbar harbour gave a total of at least 225 nests on 17th May (AFA).

The first report of **Common Terns** this spring was an inland one of three at Sanquhar sewage works in Dumfriesshire on 18th April (JL). Two were at St Andrews on the 22nd (MHEC), and three near Monifieth, Angus, on the 24th (HB). At Longannet, Fife, 40 or 50 pairs bred in 1961 on low islets in the area enclosed by the sea wall used as a settling area for the muddy waste from the nearby power station. 1962 must be the last year in which they can nest, as the level of the mud is rising. There were 90 nests on 28th June, as well as 65 deserted eggs which had been flooded by recent rain. Quantities of grass, sticks and other material were used by the observers to raise low lying nests and to make some completely new ones. Nearly all were accepted, including one made entirely of a large piece of fibreglass. On 1st July 97 nests were counted. Two Arctic Terns were seen there on 13th May, and up to 24 Sandwich Terns were present from mid May to mid June without attempting to nest, though several of them were seen mating (JH). An **Arctic Tern**—tarsus 16mm —was found on Garvald Law in the Moorfoots on 19th May.

As it had been dead for two or three days it may have come in with the gale on the 17th (WB).

The first **Little Terns** were reported on 24th April, when four pairs were at Buddon Burn, Angus (HB). Four at Forvie Sands, Aberdeenshire, on the 26th had just arrived as they were not there earlier (ETV). The first two **Sandwich Terns** were at Port William, Wigtownshire, on 9th April (AFA). After a gap there was a report from Elie, Fife, on the 20th (PGB), and two were at Pease Bay, Berwickshire, on the 21st (MJH, DGL), one at Aberlady (JBd, WKB) and three at Inverness (MR) on the 22nd, seven at Tyninghame on the 23rd (HAF), and 12 at Aberlady by the 25th (HAF, KSM).

An occasional **Razorbill** has been seen about the Lamb, off North Berwick, in recent years. An egg and a chick found on 9th June are the first proof of breeding (RWJS). An oiled and recently dead **Little Auk** was found at Barns Ness, East Lothian, on 23rd April (AMacd). A tremendous increase has taken place in the number of **Puffins** on Craigleith in the Firth of Forth. Between 500 and 600 birds were estimated by two groups of observers, and this ignored birds underground. Two nests with eggs were found in open crevices—an unusual thing there (RWJS).

A **Turtle Dove** was seen near Gartmore Station, Perthshire, on 6th June (MFMM).

The first **Cuckoo** was reported in Wigtownshire on 20th April in a letter to the *Scotsman*. It was at L. Ba in Mull two days later (LS, MVS), Walkerburn on the 25th (JBal), and in the Moorfoots on the 26th. There were more in this last area than for the past two years, and consequently they were more vocal (WB).

In response to our appeal (*antea* 2: 43) we have received a few reports of **Barn Owls**. That the south-west is probably the best area in which to look for them is testified by reports from the Whithorn area (AFA) and Caerlaverock (HD). On Islay, two were flushed from a copse at Bowmore and a third seen by the mouth of the Laggan on 19th February (JC per MFMM), while Dr Tait sees them regularly at Bruichladdich (per MFMM). In Midlothian one was seen this spring near Mid Calder. They have roosted at various sites about the Addiewell shale oil works since 1939, and still do so (HH).

In spite of the late season for early migrants, **Swifts** arrived well up to time, with several April records. The following reports probably give a fairly accurate picture, especially as the weekend fell on 28th/29th April:

29th Apr—1 Gladhouse, Midlothian (DGA).
30th Apr—5 Haddington (AMacd), 1 Inverleith (THS) and 3 Blackford (ATM), both in Edinburgh.
1 May—Hirsel, Berwickshire (HDH), Glasgow (MS per MFMM), Duddingston (DRA) and Fairmilehead (HAF), both in Edinburgh.

2 May—1 Gullane, East Lothian (WKB), now 25 at Inverleith (JHS), 15 Linlithgow, West Lothian (KSM).
8 May—"not till today" in Inverness (MR), 3 Dornoch—earliest for 29 years (DM).

A **Green Woodpecker** was seen on Corstorphine Hill, Edinburgh, on 22nd April (AA). Although the species has bred within the city for some years it is slow to consolidate or progress much further. One was seen near Lanark on 11th March (GHA, ME, GLAP). In the county the birds were back again at the 1961 breeding site near East Kilbride (see *antea* 1: 454) (DL, AMcC, AW), and a letter in the *Scotsman* on 26th June records that Green Woodpeckers have been about Dalzell Estate, Motherwell, for several years, and that a pair was seen this year with young in a nest in a tree on the estate. As **Great Spotted Woodpeckers** have apparently never bred at Tentsmuir (*antea* 2: 152) it is worth noting that a pair was watched feeding young at a nest not far away at St Fort Wood near Wormit in June. A Great Spotted Woodpecker was seen there in March 1961 but no nest was found that year (LBT).

Swallows were about two weeks late this year. A single bird was seen on 13th April in advance of a most impressive series of observations from the 20th to the 24th:

13 Apr—1 Cramalt, between Talla and St Mary's Loch (HAF).
20 Apr—moving in Wigtownshire (RS), 12 at the Hirsel (MJH, DGL) and 2 Duns (WMLH), both Berwickshire, and noted Lundin Links, Fife (PGB).
21 Apr—noted Haddington (AMacd), 1 Longannet (JH).
22 Apr—1 in Moorfoots (WB), 6 Gladhouse (RWJS), 10 Aberlady (DGA, JBd, WKB, DJ, TCS, JHS), 1 Longniddry, 1 Musselburgh (DGA), and in Edinburgh at Granton (AMi) and 1 Colinton (ATM).
23 Apr—1 Barns Ness, East Lothian (AMacd).
24 Apr—1 Crichton, Midlothian (KSM), 1 Kingoodie, Perthshire (HB).

House Martins arrived about the usual time, which meant that instead of being perhaps a fortnight later than the Swallows they came more or less with them. This is a clear demonstration of the way in which the early migrants were held up by the weather but the later ones were little affected:

20 Apr—1 Sandhead, Wigtownshire (RS), 1 Moorfoots (WB).
23 Apr—1 Lundin Links, Fife (PGB).
29 Apr—1 Colinton, Edinburgh (ATM).
30 Apr—2 Haddington (AMacd).

Sand Martins, being early migrants, were held up and arrived a good two weeks late. A few reports on 13th and 14th April were followed by a gap until the 20th to 24th—the same dates when the first Swallows were being seen:

13 Apr—New Cumnock, Ayrshire (JAB), Inverleith Park, Edinburgh (JHS).
14 Apr—11 Lennel, Berwickshire (DGL).
20 Apr—Duddingston (DRA), St Andrews (MHEC).
21 Apr—7 Walkerburn (JBal).
22 Apr—Sandhead, Wigtownshire (RS), 3 in Moorfoots—where general by 29th (WB), 1 Longannet (JH).

23 Apr—single birds at W. Saltoun, Humbie, and near Haddington, all East Lothian (AMacd), 3 Aberlady (WKB), Dalkeith, Midlothian (HAF), Lundin Links (PGB).
24 Apr—1 Crichton, Midlothian (KSM).

A **Magpie's** nest with six young birds was found in a fir at Lochwood, near Moffat, on 27th April. Magpies have been virtually absent from this part of Dumfriesshire for a good number of years (RWA, ED). A **Jay** was seen at Tulliallan, Fife, on 24th April. The observer searches unsuccessfully for a nest there each year (JH).

Great Tits and **Blue Tits** have been very scarce in the Invergowrie district on the Perthshire/Angus border this spring (HB).

Fieldfares were still present at Manderston, Berwickshire, on 4th May (SJC), and one was seen in Glen Lyon, Perthshire, the same day (HB). The first **Ring Ouzel** was not seen in the Moorfoots until 1st April. By the 15th they were generally distributed in that area (WB).

Not one **Wheatear** was reported in March, and only a very few in the first week or 10 days of April. The records do not show the clear picture given by those for Swallow and Sand Martin, but this species was probably about a fortnight late:

1 Apr—Thornhill, Dumfriesshire (JHS).
5 Apr—1 cock Islay (JMu).
6 Apr—1 cock Kingsbarns, Fife (HB).
7 Apr—New Cumnock, Ayrshire (JAB)—and 8th (WA, JGY).
8 Apr—2 cocks Moorfoots (WB), 1 bird Dalwhinnie, Inverness-shire (PGB).
10 Apr—3 Glenkill, Dumfriesshire (DS), 1 Drem, East Lothian (per AMacd).
12 Apr—1 Crathes (MWJ), Mull (EK per TCS).
13 Apr—3 St Mary's Loch area (HAF).
14 Apr—1 Walkerburn, Peeblesshire (JBal).
15 Apr—2 St Abbs, Berwickshire (SJC, MJH, DGL), 6 Carnethy Hill, Midlothian (HAF).
18 Apr—Arisaig (EK per TCS).
20 Apr—moving in Wigtownshire (RS).
22 Apr—prominent Aberlady (JBd, WKB), I Longannet (JH).

A Wheatear on the West Linton side of the Cauldstane Slap on 12th May was evidently on the move, and on the basis of colour and larger size the observer identified it as a cock of the Greenland race *Oe. oe. leucorrhoa* (WB).

Wigtownshire must be one of the best parts of Scotland for seeing **Stonechats**. Many pairs wintered and others arrived in March. They are common on the rough heathland of the Machars, and also about in good numbers in the coastal parts of the Rhinns. Along the same five miles of coast where there were ten pairs in October 1961 (*antea* 2: 53), over 15 pairs were counted on 21st April (AFA). A poorly marked cock was at Tyninghame on 18th March—probably a migrant (WMS, RWJS). In the Pentlands a pair was at Carnethy Hill on 15th April (HAF, IMF). As a pair was at Threipmuir in 1961 (*antea*

1: 460), this is further evidence of a very slow return to the area.

An early cock **Whinchat** was seen near Balerno on 23rd April (KSM). Apart from this record the first birds were seen early in May—about the usual time. A cock was at Glencorse Reservoir, Midlothian, on the 3rd (HAF), a number were passing through the Moorfoots on the 5th (WB), and a remarkable party of about 20 was at Corehead, on the Annan Water, on the 7th (RWA, ED).

Only a few arrival dates are reported for **Redstarts**—one at Gifford, East Lothian, on 19th April (AMacd), one at Gladsmuir, East Lothian, on the 25th (KSM), and a pair at their breeding site near Milton Bridge, Midlothian, on the same day (DD).

A **Black Redstart** was at Tundergarth, Lockerbie, for most of the day on 21st April. It fed in the midden, and flitted about, singing from a gable or a branch. From its plumage—especially the lack of any white flash on the wings—it was evidently a first year cock. This is a new species for Dumfriesshire (PMG, RTS).

There was a most spectacular rush of **Robins** on the Bass Rock from 17th to 22nd April. During that time no less than 44 were caught in one mistnet under difficult conditions. Such numbers represent an enormous movement. Five Robins were found dead on the rock, and from the range of weights of the birds which were caught—13 to 18 gms—it seems that they had been involved in a taxing passage. Hedge Sparrows (*q.v.*) were also moving (JBN).

Reports of reeling **Grasshopper Warblers** come from Saltoun, East Lothian, on 28th May (ATM), Tulliallan, Fife, on 3rd and 9th May—thought to be an unmated bird (GD, JP), and from Benderloch Station, Argyll on 13th May (TW).

The first **Sedge Warbler** was in East Fife on 28th April (RSW), one was at Stormont Loch on 3rd May (HB), there were two near Walkerburn on the 7th (JBal), and pairs were at Lochmaben on the 11th, West Linton on the 13th, and Dirleton the same day (AFA). At Duddingston the first one was not noted until the 22nd (DRA).

The first **Blackcap** was singing at Gladsmuir, East Lothian, on 25th April (KSM). In the Valleyfield district of Fife this year a pair was present but no nest was found, while three other cocks did not remain in the area (JH). A cock singing near Troon on 10th June was the first the observer had seen in Ayrshire (RMR). The only arrival date reported for **Garden Warblers** was 11th May, when two were at Lochmaben (AFA). In West Fife they have been scarce this year—possibly because of disturbance to their habitat (JH). The only reports of **Whitethroats** before mid May are of single birds at Gladsmuir on 25th April (KSM), Aberlady on the 29th (WKB), and Kingoodie on 6th May (HB).

Willow Warblers appeared at the same time as the Swallows and martins:

18 Apr—1 in song at Garvald Farm in the Moorfoots (WB).
19 Apr—Monreith, Wigtownshire (AFA).
20 Apr—on the move in Wigtownshire (RS).
21 Apr—4 Threipmuir (HAF), and noted Currie (JHS), both Midlothian, noted St Andrews (MHEC).
22 Apr—1 High Valleyfield, Fife (JH), 3 Gladhouse (RWJS).
23 Apr—Hound Point, West Lothian (TCS), Duddingston (DRA).
24 Apr—1 Haddington (AMacd), Kingoodie (HB).

Chiffchaffs do not appear to have arrived any earlier than the Willow Warblers except in a few places:

12 Apr—Monreith (AFA), singing Dumfries (WA).
21 Apr—3 singing and chasing at Lade Braes, St Andrews, and again on the 22nd, but gone by the 24th (MHEC, JMcF), 1 singing Belford, Edinburgh (CPR).
22 Apr—singing over rhododendrons at Newbattle Church, Midlothian, and again on 6th May (EH).
24 Apr—4 singing Port Logan, Wigtownshire (AFA).
25 Apr—1 Gladsmuir, East Lothian (KSM).

While some of these are hardly worth mentioning for the dates—since the birds had probably been present earlier—the localities may be of interest. Other Chiffchaffs are reported from Milton Bridge, Midlothian, where they were almost certainly feeding young on 16th June (WAC), from suitable habitat for breeding near Dalhousie, Midlothian, on 7th May (EH), and singing at the end of April by the landing place on Eigg, where one was heard in 1960 (*antea* 1: 383) (LS, MVS).

The only arrival dates reported for **Spotted Flycatchers**—two in the Moorfoots on 10th May (WB), and at Duddingston on the 16th (DRA)—may not be representative.

Ten **Hedge Sparrows** were caught on the Bass Rock with the rush of Robins from 17th to 22nd April. They weighed from 16½ to 22½ gms (JBN).

Several pairs of **Yellow Wagtails** *M. f. flavissima* nest each year in an area of rough pasture within the northern boundaries of Glasgow. There were three pairs in both 1960 and 1961. Usually the cocks arrive in late April or early May, and the hens some two weeks later. They have time for one brood only, and are gone by September—latest date, a juvenile on 15th September 1961. This year one of the cocks was already paired as early as 4th May. From 24th April to 11th May a cock of the Blue-headed form *M. f. flava* (a detailed description has been supplied) was present, and on 8th May it was displaying to one of the local *flavissima* hens (WW). At Aberlady a Yellow Wagtail of undetermined race was seen on 5th May (MFMM), and a cock Blue-headed, fully described, on 5th June (EH). We continue to use the old nomenclature for these *flava* Wagtails and leave it to others to decide, if it is possible, whether birds showing the characteristics of the Blue-headed race are Blue-headed Wagtails or mutants thrown up by the British population of Yellow Wagtails.

A **Waxwing** was at Invergowrie on 26th April (HB). A **Great Grey Shrike** was perched above the railway track near Parton, Kirkcudbrightshire, on 18th February (GHA, ME).

Three **Hawfinches** were seen on the edge of Binning Wood, East Lothian, on 13th May (MFMM), and one in the Royal Botanic Garden, Edinburgh—where they were seen quite often a few years ago—on 22nd April (CPR). Nine **Siskins** were still with a mixed flock of finches at Gifford, East Lothian, on 23rd April (AMacd). A pair almost certainly nested at Tulliallan, Fife, but proof is lacking. The birds were watched there on 14th May (JH). A flock of some 25 **Twite** was seen near Eaglesham, Renfrewshire, on 17th February (LAU). **Bramblings** are reported more widespread than usual in and around the Clyde area; there were three with Chaffinches by the West Kilbride/Dalry, Ayrshire, road on 13th January. several with Chaffinches in Stirlingshire by the Balfron/Buchlyvie road in December 1961, several near Buchlyvie Station, Perthshire, on 25th February, and some with Chaffinches and Greenfinches near Thankerton, Lanarkshire, on 28th January (GHA, ME). No large flocks have been reported.

Four **Lapland Buntings**, described by the observer, were seen in Berwickshire at Kyles Hill, near Hule Moss, on 1st January (DGL). Though the **Snow Bunting** is a common winter visitor to Scotland it may be worth noting, for the sake of completeness, two flocks reported in addition to those previously recorded (*antea* 2: 56, 106). In Ayrshire there were between 100 and 150 in a stubble field at New Cumnock on 6th January (JAB), and in Renfrewshire about 50 on barley stubble on 10th March (LAU).

We know of only two reports of **Tree Sparrows** in Kinross-shire (*antea* 1: 431, *Scot. Nat.* 1955: 104). A small flock was seen at Old Manse of L. Leven on 6th October 1960 (GD per RWJS), and odd birds have been heard, but never seen, for several years. One was seen on 27th May this year, and a nest with three young birds found on 23rd June in a small group of trees in a field. This is the first breeding record for the county. At least three more Tree Sparrows were heard in another area (TB, RWJS). At Kirkhill, Inverness-shire, a small colony—the only one the observer knows in East Inverness—has associated with House Sparrows about a farm steading since at least 1960. There were about 12 on 6th March 1960, about 40 in March 1961, but only about six in April 1962 (MR). At Dornoch, Sutherland, a small colony nests in the foundaions of occupied Rooks' nests, starting their operations before the young Rooks fledge. A few House Sparrows use similar sites (DM).

1961 and earlier notes

A **Sooty Shearwater** was seen some eight to ten miles out from Troon on 23rd July 1960 Several Manx Shearwaters were there for comparison, and good views were had at 40 yards range, when the pale white line on the underside of the wing could be seen (WW).

At Hilda Marshes, Glasgow, a **Whimbrel** was seen on 25th August 1961 (WW). A **Wood Sandpiper** was in the Low Parks, Hamilton, Lanarkshire, on 12th and 13th August 1961 (GHA, ME, GLAP), and a **Spotted Redshank** at the same place on the 17th and 26th (GHA). A **Greenshank** was seen at Hilda Marshes on 1st April 1961, and five **Ruffs** on 29th August 1960, and one on 31st July 1961. **Oystercatcher, Ringed Plover, Common Sandpiper** and **Dunlin** occur on spring and autumn passage (WW).

Two **Pied Flycatchers** were seen at Culquoich Estate, Glenkindie, Aberdeenshire on 9th May 1961, but we have no information as to whether they were breeding (JDP per EAG).

Further evidence of immigration of **Goldfinches** (see *antea* 2: 54) is provided by 28 near Redcastle, in the Black Isle, on 24th November 1961, and a small flock reported from near Strathpeffer about the same time. Goldfinches are uncommon in the area (WHH). Fifteen **Twite** at Caerlaverock, Dumfriesshire, where they are regular winter visitors, were seen on 30th October 1961—three days earlier than those previously reported (*antea* 2: 55) (HD).

General observations on behaviour, plumage, etc.

A pale-coloured **Pink-footed Goose** was seen at Libberton, Lanarkshire, on 2nd April (PGRB).

Though the coast of Skye is bounded in many places by tremendous ranges of cliff, few of these fall into deep water, and there are few sea-bird colonies of any note. **Fulmars,** however, are widely distributed. In June they were found to have been a source of food to the **Golden Eagles** in five different coastal territories. In four of these the pluckings of single Fulmars were found on the cliffs frequented by the eagles, but in the fifth territory pluckings of about ten different Fulmars were scattered along half a mile of the top of the nesting cliffs. In each locality the eagles conveniently identified themselves by shedding their own body feathers and down at the plucking places (DAR).

The white-headed **Oystercatcher** seen at Barnbougle on 17th March (*antea* 2: 107) stayed there until at least 2nd June (TCS).

On 3rd May a **Woodpigeon** was flushed from the upper part of a steep, treeless, hundred-foot crag in Inverness-shire. There was a typical twig nest, with two eggs, on the bare rock, beside a jammed block and under a slight overhang about ten feet below the crest of the crag—a site reminiscent of many favoured by Ravens. It was only about 60 feet away from a Peregrine's eyrie, containing three eggs and surrounded by the remains of the bird's prey, including pluckings of a Woodpigeon, there being pigeons in the wood below. While rock nests of this species are apparently not exceptional the other circumstances make this instance somewhat unusual (DAR).

A **Carrion Crow** seen regularly since July 1961 near Robroyston, Glasgow, has all-white primaries and secondaries on each wing. Another, with traces of white on the secondaries, is often with the white-winged bird (WW).

A **Song Thrush's** nest with seven eggs was found at Walkerburn in April. It is not known whether two females or two separate layings—caused by the cold weather—could have been involved. The nest was deserted by the birds (JBal).

An almost fully fledged **Willow Warbler**, "found" by a small girl, was fed on bread and milk and kept overnight, and placed the next day in the short tunnel leading to a nest containing five half-grown Willow Warblers. The foundling moved into the nest, and the adults returned with food after some hesitation. Two days later the stranger was still there, at the very back of the nest, and obviously accepted by its foster parents (JH).

REVIEWS

Birds and Woods. By W. B. Yapp. London, Oxford University Press, 1962. Pp. 308; text figures, tables, 28 plates and illustrations. 35/-.

This is an original and stimulating book in which the approaches of plant and animal ecologist are blended. Dr Yapp has aimed to provide information about all aspects of the lives of birds which are associated with trees, but particularly about their existence as a community conditioned by environment.

Sampling techniques for counting woodland birds and estimating relative abundance of the different species have been an essential tool in the construction of the work. The opening chapter is a pleasantly simple and readable description of these methods, and although the author does not claim a spurious accuracy for his results they have good comparative value and rise far above woolly generalisations. An admirable short account of British woodlands follows, giving main types, structure, history and distribution in relation to climate and geology. The status of native and semi-natural woodland, and the activities of the Forestry Commission are discussed, with the introduction of useful forestry and botanical terms.

The main types of woodland are then described in greater detail and numerical data for their bird populations are given. Each type, distinguished by dominance of a particular species of tree, has its own characteristic assemblage of different birds. Most species occur in a variety of woods but some show apparent preferences, the Willow Warbler being outstandingly a bird of the north-west Highland birchwoods, while the Pied Flycatcher belongs mainly to sessile oakwoods. Only a few have a specialised choice, such as the Crested Tit of the Highland pinewoods, but several (*e.g.* Capercaillie, Goldcrest, Siskin and Crossbill) nest almost entirely in coniferous woods, a habitat preference which is matched by the largely Scottish distribution of the group. Pedunculate oakwood is generally the most productive for bird-life but Forestry Commission plantations are better than the casual observer might suspect, and even support nesting Kites in Wales. Winter populations are discussed but most of the data refer to the breeding season.

The significance of the ecotone or transitional zone between main climax types of vegetation is emphasised in dealing with small woods and semi-woods, and many birds are shown to belong to ground of open tree or shrub growth. Man has been responsible, through farming and urbanisation, for creating new and extensive areas of partly wooded habitat, and some birds are now more familiar in these artificial settings than in their original haunts. That particularly important but much neglected habitat, the hedge, is the subject of an interesting essay.

Then there is a picture of the changes in bird populations accompanying the growth of woods from seedling stage to maturity. The woodland bird community is discussed from many aspects as an inter-related group of species and individuals. Species are classified according to their food and each is shown to exploit a different range of habitat, though some overlap in food habits. Here we are led to controversial issues such as interspecific competition and the effects of predators on populations of their prey. Song, territorialism, nesting habitat, roosting and flocking habits, adaptability to habitat and population regulation all find discussion in this review of inter-relationships. And the effects of the birds on the woods is not forgotten: one intriguing suggestion here is that the Jay's habit of burying acorns may be important in the maintenance and spread of natural oakwood.

Geographical distribution patterns are explained primarily in terms of limiting climatic factors. Dr Yapp has followed a fashionable trend in showing maps with isolines of climatic factors such as temperature, rainfall and sunshine duration which fit fairly closely the geographical distribution limits of certain species. Birds are, however, a particularly intractable experimental material for obtaining proof of the inference that this is a true cause-effect relationship. The northward shift of range in some birds under recent temperature amelioration is perhaps a more convincing demonstration of climatic control, although it would seem from examples mentioned throughout the book that substantial, unprecedented and usually unaccountable change of distribution is so frequent as to be almost a characteristic of birds. Carrying on from the climate theme, there is a hypothetical reconstruction of the Quaternary history of woodland birds according to the widely accepted sequence of vegetational changes, assuming that habitat requirements have remained constant.

A final systematic list gives the geographical distribution and habitat range of each species, with notes on certain other aspects of their lives. The unorthodox systematic treatment will be applauded by those who believe that systematics should be a means to an end.

The fifteen black and white bird illustrations include a fine Tunnicliffe frontispiece of Pied Flycatchers and a selection from Bewick's *Land Birds*, while twelve half-tone plates are mainly of different types of woodland.

The book as a whole has a scope and measure of integration which could only have come from years of careful thought, planning and field work, during which the ideas and themes have gradually matured. Using woodland birds as his material and ranging over many fundamental aspects of avian biology, Dr Yapp has made an outstanding contribution to ecology. In these days of team projects and organised enquiries in ornithology it is refreshing to find so full a study which is essentially the work of one enthusiast, whose own field experience extends over a large part of Britain. The author nevertheless takes adequate account of the literature.

Some dangerous speculation in places is freely admitted and provides plenty of food for thought, while exceptions to some findings might be quoted according to more local experience. There are a few details of questionable accuracy, such as the Cumberland distribution of the Green Woodpecker (p. 292) and the statement that the Willow Tit is not a bird of the birchwoods (p. 256). Again, the man of Kent who goes to live in Skye might not agree that "Great Britain is not large enough to show any great difference in climate from one part to another." However, these are trivialities in a work which contains so much meat and is well worth the attention of all who take a serious interest in our native birds.

Derek A. Ratcliffe.

Birds in Britain. By Kenneth Richmond. London, Odhams Press Ltd, 1962. Pp. 160; 225 photographs (16 in colour). 30/-.

It is always pleasant to welcome a book by a Scottish ornithologist, and this is one which should find a vacant ecological niche. The modern identification guides make it easy for the beginner to put a name to his birds: this book takes him on to the much more rewarding stage of being able to appreciate the individual characters of each species and its place in the overall pattern.

After a short introductory chapter, dealing with the history of bird-watching and some current trends of investigation, the book proceeds to discuss all but the most uncommon British birds in their systematic order. This programme could have resulted in a dull catalogue, but the author has wisely not attempted to give each species uniform treatment and he allows himself to digress at length on the topics which interest him most. These digressions are wholly successful and show Mr Richmond as an accurate and sensitive observer with an infectious enthusiasm for his subject.

It is, however, disappointing that a number of minor errors should have crept into this book, especially where the author is not writing at first hand. These are often due to a certain carelessness in writing. For instance, the uninitiated may well wonder why it should be "incredible" that young Puffins, Guillemots and Razorbills should reach the sea by tumbling down into it from the cliff-face. No mention is made of the fact that this journey is performed long before the chicks are capable of flight, although this is presumably what the author had in mind. Moreover this does not hold good for the Puffin chick which does not leave its burrow until it is fully fledged and which is not attended by its parents when it puts out to sea. Most of the errors are not likely to cause much damage, but it is to be devoutly hoped that readers of this book will not accept at its face value the statement that "a pipit seen parachuting in song-flight from the the top of a tall tree in May or June is almost certainly a Tree Pipit."

At a more general level, it seems a pity that Mr Richmond has so seldom made any reference to a bird's distribution outside the British Isles: there are so many cases in which this information helps enormously in understanding the bird's status in Britain. To Scottish readers, however, this parochialism may seem to be more than offset by the fact that the book is so largely written against a Scottish background, although even in this narrow field there are some statements that call for comment. Storm Petrel colonies, for instance, are not restricted to the Atlantic seaboard, and Edinburgh ornithologists will be surprised to read that the Black Redstart has settled in their town and interested to know whether there is any foundation for the statement that the recent spread of the Gadwall in their area "is due almost entirely to the escape of pinioned birds."

The photographs vary widely in quality and interest. Too many are unsharp or give evidence of over-enlargement, and the general effect would have been very much improved by a more critical selection and more attention to artistic presentation. Some of the colour photographs tend to be garish and would seem to have suffered in reproduction. In only a few cases is any information given as to the taking of the photographs, and this is particularly unfortunate as some of the other photographs would appear to have been taken of birds in captivity, notably the geese and ducks. Perhaps the flight photographs are the most outstandingly successful, but there are also some portraits of waders on migration which bear impressive proof to Mr Richmond's skill as a photographer.

D. G. ANDREW.

CORRESPONDENCE

SIR,

Spotted Crake in Midlothian

With reference to R. W. J. Smith's record of a Spotted Crake at Gladhouse (*antea* 2: 30), it is as well to observe that this species, when seen from behind, is indistinguishable from the Carolina Crake *Porzana carolina*. In view of the date of Mr Smith's bird, however, 20th July, the probability of its being a Spotted Crake is overwhelming, but a similar bird seen at Castle Douglas by A. D. Watson and myself on 9th February 1958, and F. D. Hamilton on the 16th, cannot, when the date is considered, be identified with the same measure of certainty, which is why we have never submitted the record.

M. F. M. MEIKLEJOHN.

(Professor Meiklejohn's point is a pertinent one, but we feel that the circumstances of this record are sufficient to eliminate the rather remote chance of its being the American species.—ED.).

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

FIFTEENTH ANNUAL CONFERENCE

DUNBLANE HOTEL HYDRO, PERTHSHIRE

26th to 28th October 1962

PROGRAMME

Friday 26th October :

5 to 7.30 p.m. and 8.30 to 9.30 p.m.	Conference Office in the Hotel Hydro opens for Members and guests to register (8s 6d each). Collect name cards and Annual Dinner tickets (16s 6d each).
6.15 p.m.	Meeting of Council.
6.30 p.m. to midnight.	Lounges reserved for informal discussions and refreshments. Ballroom reserved from 8 p.m. for showing slides and films exhibited by Members who **must** inform C. E. Palmar, 5 University Avenue, Glasgow W.2, not later than 22nd October if they wish to have slides or films included.
9.30 p.m.	Excursion leaders will describe the places to be visited on Saturday and Sunday afternoons; in the Ballroom.

Saturday 27th October :

8.45 to 9.15	Conference Office open for registrations.
9.20 a.m.	Official Opening of the Conference in the Ballroom. ADDRESS OF WELCOME by Archibald M'Lellan, Esq., Provost of Dunblane.
9.30 a.m.	LECTURE on "Geographical distribution and species formation in birds of prey," by Prof. Dr K. H. Voous (Zoological Museum, University of Amsterdam), followed by discussion.
11 a.m.	INTERVAL for coffee and biscuits.
11.30 a.m.	COLOUR FILM. First showing in Britain of "Birds of the Galapagos," introduced in person by Heinz Sielmann (Munich, Germany).
1 to 2 p.m.	INTERVAL for informal lunches (Hotels must be informed).
2 to 5.30 p.m.	EXCURSIONS by private cars leaving the Hotel Hydro Car Park (See under "Information"). Details of the excursions will be posted on the Conference notice board.
6.15 p.m.	26th ANNUAL GENERAL MEETING OF THE CLUB in the Ballroom. BUSINESS: (1) Apologies for absence. (2) Approval of Minutes of 25th Annual General Meeting of the Club held in Dunblane on 28th October, 1961. (3) Report of Council for Session 25. (4) Approval of Accounts for Session 25. (5) Appointment of Auditor.

(6) Consideration of the following proposed amendments to the Constitution:

(a) That the words "or his or her Membership shall have become undesirable, or he or she shall have personally assisted in or connived at the capture or destruction of any bird, nest or eggs, in the British Isles, by purchase or otherwise, likely, in the opinion of the Council, to lead to the extermination or serious diminution of that species as a British Bird" in Paragraph 3(g) be deleted.

(b) That the words "The Club Treasurer shall collect all subscriptions" in Paragraph 4(a) shall be deleted and in their place shall be substituted "The Hon. Treasurer shall supervise the collection of subscriptions."

(c) That Paragraph 4(c) shall be deleted and in its place shall be substituted the following:
"(c) Nominations:
Nominations for vacancies among the Office-bearers or the elected Members of Council must be received by the Club Secretary not later than 31st July each year. Intimation of all nominations shall be given in the Notice calling the Annual General Meeting. Nominations for any vacancy in a Branch Committee must be received by the Branch Secretary not later than one week before the Annual General Meeting of the Branch."

(d) That Paragraph 4(e) shall be deleted and in its place shall be substituted the following:
"(e) Branch Committees.
The Office-bearers of each Branch shall be: (1) the Chairman; (2) the Vice-chairman; and (3) the Branch Secretary. Each of these shall hold office for three years and shall then be eligible for re-election. These, together with the addition of such members of the Branch up to a maximum of four, as each Branch shall deem necessary at each Annual General Meeting of the Branch, shall constitute the Branch Committee. Each Branch shall elect annually one member of the Branch Committee to represent the Branch on the Council. The Branch Chairman (or in the absence of the Chairman, the Vice-Chairman) shall preside at meetings of the Branch; and the Branch Secretary shall keep Minutes of the Branch Meetings and perform such other duties as may be assigned to him. He shall be empowered to receive and transmit subscriptions as may be arranged"

(7) Election of two new Members of Council. (The Council recommend the election of Dr G. M. Dunnet and G. H. Acklam to replace K. S. Macgregor and Prof. V. C. Wynne-Edwards who retire by rotation).

(8) Any other competent business.

7.30 for 8 p.m. ANNUAL DINNER in the Diningroom of the Hotel Hydro (Dress informal).

Sunday 28th October:

9.30 a.m. LECTURE AND FILM "The Royal Penguin" by Dr Robert Carrick (Division of Wildlife Research, C.S.I.R.O., Canberra, Australia).

11 a.m.	INTERVAL for coffee and biscuits.
11.30 a.m.	COLOUR FILM "Wild Highlands" (produced by the British Transport Commission).
1 to 2 p.m.	INTERVAL for informal lunches.
2 p.m.	EXCURSIONS by private cars leaving the Hotel Hydro Car Park.

INFORMATION

(1) **Conference Post Card.** In order to simplify arrangements, it is **essential** that Members intending to be present should complete the enclosed printed postcard and send it to the Club Secretary **not later than 22nd October.** Owing to limited seating accommodation, the Council regrets that Members may invite only one guest each to the Annual Dinner.

(2) **Excursions.** Members are asked if possible to provide private cars and arrange to fill their passenger seats; to avoid congestion in the Car Park the minimum number of cars will be used. Petrol expenses should be shared. Maps of the area should be brought (O.S. 1" maps; Old edition Nos 62, 63, 66, and 67; New edition Nos 53, 54, 55, 60, and 61). Members who wish to go out on their own are particularly asked not to go in advance of led excursions to avoid disturbing the birds.

(3) **Registration.** Everyone attending the Conference must register (8s 6d each) at the Conference Office on arrival (opening times—see Programme). Members wishing to attend the Annual General Meeting **only** do not require to pay the registration fee which covers incidental expenses—hire of films, projection equipment, mid-morning coffee, etc.

(4) **Annual Dinner.** Tickets for the Annual Dinner (price 16s 6d inclusive of tips) should be purchased when registering on arrival. Members and guests staying at the Hotel Hydro will be charged for the Annual Dinner in their inclusive hotel bill, but **must** obtain a ticket from the Conference Office. All tickets will be collected at the Dinner. No payments should be made in advance to the office in Edinburgh.

(5) **Hotel Bookings.** All Hotel bookings must be made direct with the hotel in which you wish to stay. Owing to the shortage of single rooms, members are urged to make arrangements to share a room with a friend. Private arrangements must be made with your hotel for lunches each day.

(6) **Swimming Pool.** The indoor swimming pool in the Dunblane Hotel Hydro will be available to residents during the weekend at no extra charge.

HOTEL ACCOMMODATION IN DUNBLANE

DUNBLANE HOTEL HYDRO (Tel. 3161). Special Conference charge: dinner and bed on Friday 26th; breakfast, lunch, Annual Dinner and bed on Saturday 27th; breakfast and lunch on Sunday 28th; £4, 15s 0d. A 10% gratuity charge will be added to all bills.

STIRLING ARMS HOTEL (Tel. 2156). Bed and breakfast from 22s 6d.

*THE NEUK PRIVATE HOTEL, Doune Road. (Tel. 2150). Bed and breakfast from 17s 6d.

*SCHIEHALLION HOTEL, Doune Road. (Tel. 3141). Bed and breakfast from 17s 6d.

BLAIRALAN, Dargie Terrace. (Tel. 3196). Bed and breakfast from 18s 6d.

¶ARDLEIGHTON HOTEL. (Tel. 2273). Bed and breakfast from 15s.

*These hotels are some distance from the Conference Hotel.
¶Situated near the Hotel Hydro gates.

HOTEL ACCOMMODATION IN BRIDGE OF ALLAN

ALLAN WATER HOTEL (Tel. B. of A. 2293). Bed and breakfast from 30s.

ROYAL HOTEL (Tel. B. of A. 2284). Bed and breakfast from 27s.

Members with cars who have difficulty in obtaining single rooms in Dunblane should find that the above two hotels in Bridge of Allan have ample single accommodation. The distance from Dunblane is about 3 miles.

The above terms for hotels other than the Conference Hotel are quoted as a guide only and prices should be confirmed.

SUBSCRIPTIONS, DEEDS OF COVENANT, AND BANKERS' ORDERS

Subscriptions for the new Session are now due, and should be sent with the enclosed form to the Club Secretary. The winter number of "Scottish Birds" will only be issued to paid-up subscribers.

Members are reminded that the Club is able to reclaim Income Tax on all subscriptions paid under Deed of Covenant; this greatly benefits the Club funds by almost doubling subscriptions paid in this way. The Council invites Members who pay Income Tax at the full rate to undertake a seven-year Deed of Covenant by using the form enclosed. Completed forms should be returned to the Secretary who will forward a Certificate of Deduction of Tax for signature each year.

A Banker's Order is also enclosed for the use of Members who find this a more convenient way of paying an annual subscription; this should be returned to the Secretary and not to the Bank.

NORTHERN COUNTIES CONFERENCE

KINGSMILLS HOTEL, INVERNESS

30h November to 2nd December 1962

An informal weekend Conference will be held in the Kingsmills Hotel, Inverness, from Friday 30th November to Sunday 2nd December 1962 for the purpose of discussing ornithological and conservation problems in the north of Scotland. There will be no official programme, but short papers will be given under the Chairmanship of Dr Ian D. Pennie. Members willing to contribute a paper are asked to inform Dr Pennie, The Hollies, Golspie, Sutherland, as soon as possible.

Owing to limited accommodation in the hotel, preference must be given to those resident in the northern counties and those particularly interested in northern problems, although every effort will be made to accommodate others who apply. It is hoped that members from further south will appreciate that the purpose of this week-end is to meet the request of those who find it difficult to attend the Annual Conference because of distance, and the latter must be given priority in bookings.

All reservations must be made with the Club Secretary, 21 Regent Terrace, Edinburgh 7, and **not** with the hotel. A registration fee of 5s should be sent at the time of booking to cover the cost of morning coffees and special hire of rooms for meetings. Members not requiring accommodation must also register with the Secretary, sending a registration fee. Fees will be returned if the booking cannot be accepted.

The inclusive weekend charge at the Kingsmills Hotel will be £4. This will include bed on Friday 30th; breakfast, lunch, dinner, and bed on Saturday 1st; breakfast and lunch on Sunday 2nd. Dinner on Friday night will be an extra charge and the hotel must be informed in good time (Tel. Inverness 33034). Dinner is served between 7 and 8 p.m.

NEW BRANCH IN AYR

The Council have pleasure in announcing the formation of a new Branch of the Club in Ayr.

The Club Secretary and Mr George Waterston (Member of Council) attended a special meeting in Ayr on 25th April, at which over forty interested people, some already members of the Club, were present. It was evident that there was a great deal of interest and potential support for the formation of a Branch.

A the inaugural meeting, the following Officers were appointed—Chairman, Mr R. Macalpine Ramage; Vice-Chairman, Mr Gordon A. Richards; Secretary, Dr C. Higginbottom, 59 Forehill Road, Ayr; Committee, Dr M. E. Castle and Mrs A. E. S. Scorgie. Branch Representative, Mr R. Macalpine Ramage.

Although unable to be present at the meeting, Commander Sir Geoffrey Hughes-Onslow, R.N., was anxious to give his support and was elected Hon. President of the new Branch.

Three successful field excursions were held during the summer, and a programme of lectures has been planned for the winter months. Already twenty new members have joined the Club, bringing the total number in the area to over fifty.

The Council hopes that all Members living in the area will support this new venture by attending meetings and introducing new members, and wishes to congratulate Mr Ramage and Dr Higginbottom for their efforts and enthusiasm in establishing this new Branch.

BRANCH LECTURES

Aberdeen. Members are asked to note that meetings of the Aberdeen Branch will be held on a Monday instead of a Friday in each month, in the Senior Common Room, Marischal College.

Edinburgh. Members should note that the March and April meetings will be held at 7.30 p.m. to enable country members to attend.

CORRECTION

The Solway weekend excursion reported in the spring number (Vol. 2: 63) took place in 1962, not 1961.

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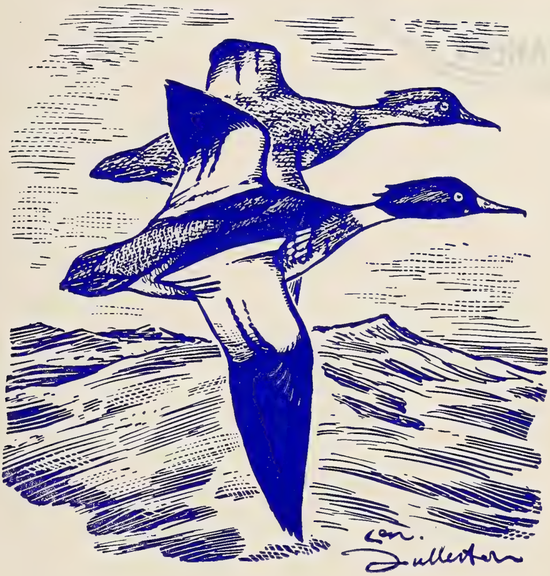
Birds

SCOTTISH BIRDS



The Journal of
The Scottish Ornithologists' Club

Vol. 2 No. 4 *Winter 1962*

FIVE SHILLINGS

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Dumfries, Dundee, Edinburgh, Glasgow and St Andrews, at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish Ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited, and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. Joint membership is available to married couples at an annual subscription of 40/-. "Scottish Birds" is issued free to members but Joint members will receive only one copy between them.

The affairs of the Club are controlled by a Council composed of the Hon. Presidents, the President, the Vice-President, the Hon. Treasurer, the Editor and Business Editor of "Scottish Birds", the Hon. Treasurer of the House Fabric Fund, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

An official tie with small white Crested Tits embroidered on it can be obtained in dark green or in navy blue by Members only from Messrs R. W. Forsyth Ltd., Princes Street, Edinburgh, or 5 Renfield Street, Glasgow, C.2 at a cost of 16s 9d post extra. A small brooch in silver and blue can be obtained for the use of Members of the Club. Price 2s 6d each from the Secretary, or from Hon. Branch Secretaries.

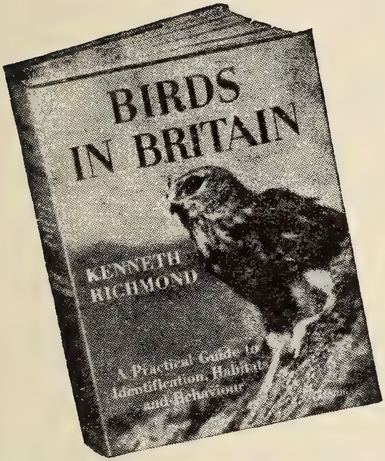
Forms of application for Membership, copy of the Club Constitution, and other literature is obtainable from the Club Secretary, Mrs George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7. (Tel. Waverley 6042).

CLUB-ROOM AND LIBRARY

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to Members during office hours, and on Wednesday evenings from 7 to 10 p.m. during the winter months. Members may use the Reference Library and borrow books from the Duplicate Section. Facilities for making tea or coffee are available at a nominal charge and Members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen can be used for the informal showing ol slides at a charge of 2s 6d per night to cover the replacement of bulbs.

EDITORIAL ADDRESS

All contributions to A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Advertisements to T. C. Smout, 93 Warrender Park Road, Edinburgh 9.



BIRDS IN BRITAIN

A Practical Guide to Identification, Habitats and Behaviour

KENNETH RICHMOND

This highly readable, superbly illustrated study is the most comprehensive to appear for years and will appeal to novice or expert. 80 pages of photographs, 8 in colour.
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In addition to its unique golf course, it has fine loch fishings, sea bathing, tennis, bowls, hill climbing, unrivalled scenery including inexhaustible subjects for the field sketcher and artist and is an ornithologist's paradise. It is, indeed, impossible to find elsewhere so many natural amenities in so small a compass.

The B.T.O. Regional Representative, who lives in the village, will be pleased to offer local advice regarding the astonishing diversity of bird life in the vicinity and to receive lists of birds from visitors.

The Hotel is fully modern, but retains its old world charm of other days, and enjoys a wide renown for its comfort and fine cuisine.

Fully descriptive brochures, including birdwatching, will gladly be forwarded on request.

Proprietor, T. HEXLEY

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For stimulating ornithological experience nothing can beat Islay in late spring. There is an astonishing variety of bird habitat. Ninety-seven different birds were seen recently in two days and that in the depths of winter ! The island is the principal wintering resort, possibly in the world, of the Barnacle Goose. It is also the last Scottish stronghold of the Chough.

For Ornithological Brochure write to The Tourist Association

Bowmore, Isle-of-Islay, Argyll

A BIRD-WATCHING HOLIDAY IN DENMARK

WHY NOT take your binoculars to Denmark next summer ? Visit the breeding haunts of the Little Gull, Avocet, Black-tailed Godwit, White Stork and many more. The Danish Institute is sponsoring a tour of the marshland sanctuaries of Jutland, together with a few days in Copenhagen and a chance to visit the Swedish observatory at Falsterbo. The party leaves Newcastle on August 20th, 1963, returns on September 2nd. The total cost depends on the number wishing to go, but will not exceed £50 including fares in both directions (from Newcastle) hire of bus in Denmark and living expenses in good small hotels. The leader will be Dr T. C. Smout. Please contact the Danish Institute, 3 Doune Terrace, Edinburgh, 3.

SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 2 No. 4 **Winter 1962**

Edited by A. T. MACMILLAN with the assistance of D. G. ANDREW and T. C. SMOUT. Business Editor, T. C. SMOUT. Cover Design (Red-breasted Mergansers) by LEN FULLERTON. *Published quarterly.*

Editorial

The Hastings Rarities. Bird-watching hit the headlines during August with the revelation of what was possibly the most blatant and extensive deception ever perpetrated on the science of ornithology. Over 100 pages of a greatly-enlarged issue of *British Birds* were devoted to a painstaking, fascinating and completely convincing proof of the falseness of very many rare and extremely rare birds recorded from the Hastings area between 1892 and 1916.

Forty-nine new birds were added to the British List between 1903 and 1916, and of these no fewer than 32 came from this small area. It is hardy surprising that grave doubts were widely expressed at the time, even in print (*e.g. Scot. Nat.* 1916: 27), but complete certainty has had to wait on the passage of time, during which the number of rare birds around Hastings has reverted to a level comparable with similar areas, and on the refined analysis of indirect evidence made possible as a result of the greatly increased number of bird-watchers in the country. The birds did of course exist, but the data with the specimens were of the scantiest, even the name of the shooter seldom being revealed. The birds were probably imported on ice: they were certainly not obtained by a legion of mysterious market gardeners and nameless hunters in Sussex and Kent.

Records of 541 rare or very rare birds obtained between 1892 and 1930, and of a further 53 sightings in the area, must now be rejected. Obviously some were genuine, and these will be reinstated if sufficient evidence can be produced, but it is inevitable that in this situation good records are condemned with the bad. Sixteen species and 13 sub-species are now struck off the British List, though ten of these species can be readmitted on the basis of later satisfactory records.

It is earnestly to be hoped that we cannot again be deceived on this grand scale. Mistakes in identification, although great efforts are made to eliminate them, may even now lead to the acceptance of a few erroneous records; but there is no systematic fraud involved in this. In the absence of suspicious circumstances an editor must believe that his contributors are basically honest in reporting what they see. Without this trust many useful records would be lost. It does however point to the advantage of personal contact—either direct or through other bird-watchers—between those who see the birds and those who must judge the record.

The lone wolf is at a disadvantage, because there is no one to say from personal experience that he is a careful witness who can be relied upon to describe accurately what he sees. It is so easy, after a look at the *Field Guide*, to embellish one's written descriptions—intentionally or subconsciously—with points that were not actually confirmed at the time of observation. A sight record of a rare bird really cannot be accepted from one person alone until that person has established his *bona fides* and competence by contact with other bird-watchers and preferably also by contributing notes on more mundane birds first. This does pose problems where there are few bird-watchers, as in parts of Scotland, but every effort should be made to get reliable witnesses to corroborate sightings of rare birds. If the local bird-watchers are not told while the news is hot one inevitably wonders why. Was the observer really such a complete lone wolf as not to want to tell anyone, or was he just not quite so sure of his bird as he now makes out?

The British List. The long-expected exposure of the falseness of the Hastings Rarities has focussed attention on the concept of the British List. Letters in *The Ibis* and *British Birds* argue that too much importance has been attached to admission of birds to the glorified status of "British," often based on one or two freak occurrences. The full treatment given such birds in standard text books tends to encourage this emphasis, when the species would in fact be better relegated to a position at the end of the book—as has been done in the *Field Guide*. This can make for difficulties in identifying rare birds not adequately described, but it does give them a standing more in line with their relative importance in the British avifauna.

Ghost thou never wert. Much excitement followed reports recently of eerie nocturnal sighs at Kinneil House, Bo'ness—supposed to be the dying gasps of Alice, Lady Lilbourne, who leapt to her death from a top-storey window during Oliver Cromwell's occupation of the house in the 17th century. Large numbers of young people, with evidently a fair sprinkling of reporters, advanced on the haunted house by night, but nothing could be seen. Stories and photographs appeared in the newspapers. Finally some intrepid young men hid in the ruins in the dark, until the dreadful noises started again; torches were switched on, and there was the ghost—variously described in the press as "a small white-breasted owl" and as "a covey of snoring pigeons."

Business Editor. Because of greatly increased pressure of work in his own business Arthur Smith has resigned from the position of Business Editor of *Scottish Birds*. Since the journal was started he has carried out this important behind-the-scenes job; and, although it is perhaps not so widely known, his initial efforts with arrangements for the printing of *Scottish Birds* and the mechanics of production were of vital importance in ever getting it launched. We would echo Professor Meiklejohn's eloquent tribute at the recent Annual General Meeting of the S.O.C. in Dunblane, and we are very glad to know that Mr Smith will still act as the link between us and our printers in Selkirk. All advertising and similar business correspondence will now be handled by Dr T. C. Smout, 93 Warrender Park Road, Edinburgh 9, who will continue to act as an assistant editor at the same time. Having already worked with Dr Smout we know that these arrangements will ensure that the business side of the journal continues to function smoothly and unobtrusively.

THE BIRDS OF ST KILDA—WINTER 1961-62

W. E. WATERS

Published records of the status of birds at St Kilda during the winter months are scanty. Prior to the evacuation in 1930 there are only occasional references to winter species, usually obtained at second hand from the St Kildans. More reliable are the records of the Rev. Neil Mackenzie who was on the island from 1829 to 1843, and left notes on its birds. Since the armed forces occupied Hirta in 1957 records have been more frequent, and this paper gives my records from 1st December 1961 to 19th February 1962 and the observations of W.O.II Wilson, R.E.M.E., from then until 4th March 1962.

The St Kilda archipelago lies close to the Atlantic storm-track, and the steep and high cliffs give rise to great wind turbulence. The much-described storms of summer are but small blows in comparison with the devastating fury of the winter winds, and because of the importance of this to the bird life the meteorological data for the winter months, December 1961 to February 1962, are given in some detail.

	December	**January**	**February**
Maximum temperature	53°F	51°F	51°F
Minimum temperature	26°F	34°F	33°F
Rainfall—Village Glen	4.1"	7.1"	3.1"
Days of gale	4	12	9

It should be stressed that "days of gale" were only recorded when the general wind over a wide area was constantly above an estimated 39 m.p.h. On many other days, not included in the table, winds of force 6 or 7 on the Beaufort scale gave gusts or even continuous wind speeds in certain exposed parts of the island in excess of 60 or 70 m.p.h. During several of the severe storms gusts of over 130 m.p.h. were recorded on an anemograph, and in a storm from the northwest even Village Glen received gusts of over 100 m.p.h. which lifted men off their feet. Although the winter was not exceptionally cold, snow covered the island down to sea-level from 2nd to 7th December, from 28th December to 1st January and again for a few days in March.

Thirty-three species of birds were seen during the three months covered by this paper, but individuals of only about 16 of these over-wintered on Hirta. For a bird to survive a winter on St Kilda it must have an adequate food supply and either the necessary shelter from gales or a complete mastery over such winds, as exhibited by the Greater Black-backed Gull. Man—both past and present inhabitants—has provided for several species one or other of both of these requirements.

At least 20 Turnstones over-wintered, and their food supply depended almost entirely on man and the Grey Seal. The majority of the Turnstones wintered in the immediate vicinity of the army camp, becoming very tame and spending much time among the swill bins just outside the cookhouse door, and eating large quantities of bread; one even ventured into the kitchens. The birds perched on top of the drystone walls and called loudly when bread was thrown out, thus attracting the rest of the flock which would fly down and start feeding almost at one's feet. Bread-eating by Turnstones has been discussed recently in *British Birds* (54:325), and tameness and association with man for food has been recorded from Sule Skerry lighthouse (*The Birds of Scotland,* p. 559). The only Turnstones seen with any regularity on the shore were among the Grey Seals, which in winter haul out to moult on the pavement of Dun and in the Glen Bay Tunnel. This association of seals and Turnstones has been recorded on North Rona by Darling.

Both the Raven and the Herring Gull depend on swill tipped on the beach. The Herring Gull rarely, and the Raven never, ventured near the cookhouse swill bins. Both species have increased since the services occupied the island. The Hooded Crow was a less frequent scavenger and does not seem to have responded to the present conditions, there being no evidence of any increase. Other species seen to take bread in the camp area have been Song Thrush, Redwing (occasionally), Blackbird (in severe weather only), and Starling.

Human habitations old and new provide essential shelter for several species. Williamson and Boyd (1960) have shown the usefulness of cleits and dry-stone wallings to the Soay Sheep and various birds, and these old man-made structures play an important role during the winter gales. They provide the only shelter in Village Glen for the Wrens, and much of the shelter for thrushes, Rock Pipits and Starlings. The more ancient Amazon House type structures in Glen Mor were frequented by the few birds (Redwings, Rock Pipits, Starlings and a Blackbird) that wintered in this exposed glen.

Of all the wintering species perhaps the most interesting is the island's own Wren *Troglodytes troglodytes hirtensis*. It is a weak flier (Harrison and Buchan estimated its speed to be little more than 12 m.p.h.) yet it has survived down the centuries despite wind gusts of over ten times its flight speed. The Wren's survival under such conditions must be due very largely to its extremely close association with shelter among rocks. In winter it is never more than a few inches from sheltered rocky crevices into which it can disappear. During the rest of the year flights of up to 20 to 30 yards or more occur and Wrens often feed on the ground some distance from the nearest shelter, but in winter such daring is never seen even on the few calm days. Short flights between boulders do occur but often a Wren will disappear into a dry-stone wall or boulder area either not to reappear for as long as the observer cares to wait or to emerge some distance further on perhaps half an hour later. Rarely the Wrens use passages beneath thick heather on the hillsides but only near the solid shelter of stone walls or cleits.

Wrens are difficult to see during the winter months and there is little song; I heard none at all in January. Usually they call only when disturbed, so that an observer arriving on the isle in mid-winter might easily think that the Wrens had left, although patient watching, often extending for over half an hour even in such high density Wren areas as the Carn Mor (Williamson 1958b), may eventually disclose a bird moving between one piece of cover and another. In winter the Wrens of the Carn Mor live in the labyrinth between the boulders, seldom appearing in the full light of day. They find their food in the gaps and cracks underneath the boulders, and in stormy weather have nothing to gain by coming out into the open, and a good deal to lose.

The Birds of Scotland and the *Handbook* mention a general dispersal after breeding, but while the young may and do move out of the territory in which they were reared there is no dispersal in the sense of Wrens appearing in areas of the island where none breed. Wrens only occur where there is sufficient rocky cover and it would seem that wherever there is enough cover there are Wrens. The only change which I noticed in their distribution in winter was that I failed to find the Wrens which nest in the gullies on the east side of Oiseval, where there is little loose rocky cover. Few Wrens were seen in winter and in the Ard Uachdarachd/Conachair region but they may well all have been on the lower scree-covered slopes.

Both *The Birds of Scotland* and the *Handbook* record the Robin as wintering on St Kilda, but the evidence for this is slender. The Robin was added to the St Kilda list by Dr Eagle Clarke (1912) on the strength of Neil Furguson's remark that it was an annual autumn visitor, seen about the houses during the winter. There are no other published records prior to 1957, since when at least six have been recorded, occurring between March and May, and between September and November. The only winter record during this period is of one seen in early December 1960 by J. B. Gallacher.

The great majority of the sea-birds were absent during the three months under review. No auks were seen, and details of the status of other species are given in the appended list. The complete absence of Fulmars until 31st January is interesting, and although the departure dates have been irregular in recent years it is obvious that a great change has taken place since the records of 50 years ago, which suggested an autumnal departure for six to eight weeks in September and October only.

In view of the paucity of observations in these waters in winter, notes made on crossings between the Sound of Harris and St Kilda may be of interest. On 1st December I saw very few sea-birds indeed—only the gulls following our vessel, a few score of Kittiwakes (mostly near the Hebrides) and about 30 Fulmars (all singly and well away from land). My return voyage on 20th February was only slightly more productive; Fulmars were more numerous (*c.* 300), 15 adult Gannets were seen, and *c.* 25 Kittiwakes (all but one adult). During both crossings a continuous watch was kept, and these numbers combined with the winter records from St Kilda indicate that very few sea birds remain in this sea area in winter.

LIST OF WINTERING SPECIES

Great Northern Diver. One in Village Bay on 28th Dec and 5th Jan. There are two previous winter records, both in Dec.

Fulmar. None seen from the island until 31st Jan; none ashore until an arrival in large numbers on 18th Feb.

Gannet. Recorded on only 11 days during the three months, with a maximum of five in late Feb. Occurred in both rough and calm conditions in Village Bay; all adults.

Shag. Scarce, seen in largest numbers in Village Bay in calm weather. Fifteen was the maximum number in Dec, decreasing to nine in Jan. The return started in early Feb and Wilson reported "hundreds" when he visited Dun on 24th.

Mallard. Two drakes in Glen Mor on 25th Feb were probably early spring migrants.

Long-tailed Duck. A female in Village Bay on 2nd, 3rd and 10th Dec, and one on 12th Feb after several days of westerly gales. The only other winter record is of two in early Dec 1960 by J. B. Gallacher.

Eider. One or two immature males over-wintered; a few adults were present in Village Bay in rough weather in Dec but then disappeared; the first adult males were not seen until 21st Mar and the ducks even later.

Peregrine. Single bird seen on 31st Jan and 12th and 17th Feb.

Water Rail. One or more in several areas in Village Glen in Dec and on 1st Jan.

Oystercatcher. The return was in Feb, as recorded by Mackenzie, who also mentions a few remaining all winter. One on 10th Feb arrived in a force 7 south-west wind and another on 18th, after which there was a gradual increase.

Lapwing. One or two in early Dec increased to five with the cold weather at the end of the month. One was found dying in the snow on 29th and the number fell until only a single bird remained in Feb.

Turnstone. At least 20 remained on the island all winter and there was some increase in mid-Feb. Four ringed on 9th Dec were seen until 2nd April.

Snipe. Mainly in Village Glen during the winter but odd birds flushed elsewhere including 1300 feet up Conachair. The 35 on Hirta decreased to about 12 after the snow at the end of Dec. There was a slight increase in Feb but a fall to only about six after the snow in Mar. During the snow Snipe tried to hide against the few tufts of grass poking through but occasionally perched on the dry stone walls from which the wind had blown the snow.

Woodcock. Single birds flushed from above An Lag and in Glen Mor in Dec and Jan. One on 25th Mar may indicate that this bird over-wintered.

Purple Sandpiper. Two or three seen throughout the winter on the rocks below the Manse or in the Tunnel in Glen Bay where, however, their association with the Grey Seals was less marked than that of the Turnstones.

Greater Black-backed Gull. About 20 wintered in Village Bay, feeding from the camp swill on the boulder beach or among the seals hauled out on Dun. The Glen Mor flock fell from 105 adults on 23rd Dec to 20 in mid-Jan, then increased to about 45 in Feb and about 60 by the end of Mar. Very few immatures were seen during the winter.

Herring Gull. After the snow of early Dec there were about 25 in Village Bay which increased to about 60 by mid-Dec and remained about this level. The main winter roost was on the pavement on Dun, but when the seals temporarily decreased here (18th-24th Jan) they returned (on 20th) to their summer roost at the foot of Oiseval, only to return gradually to the Dun roost after the seals increased on 25th. There were a few in Glen Bay in Dec but they were less hardy than the Greater Black-backed Gulls and none was seen there during the storms in Jan. About 25 had returned there by the end of Feb.

Glaucous Gull. An immature, probably third winter, first seen on 13th Jan, remained until at least 6th Mar. Fourth record for this species.

Black-headed Gull. Single birds on 2nd and 4th Dec and between 1st and

6th Jan. There are previous winter records for all months from Nov to Feb.

Kittiwake. Mackenzie says that the few that winter are generally young birds, but this was not so in the winter of 1961/62 although two or three tarrocks were seen in Dec. Adults were seen on eleven days during the three months, usually in rough conditions in Village Bay, where a maximum of 20 was recorded on 14th Dec.

Skylark. Single bird seen on 2nd, 3rd and 17th Dec in Village Glen and Ruaival. These are the first winter records.

Raven. Probably 10 or 12 birds wintered on Hirta. A flock of 16 seen on 6th Jan following a south-east wind was not seen again and is thought to have arrived from elsewhere. Has increased at St Kilda since 1957.

Hooded Crow. Though more numerous than the Raven in Mackenzie's time it is less so today, and only five or six wintered, probably the entire breeding population of Hirta.

Jackdaw. One in the camp area from 25th to 29th Dec, following several days of easterly weather. Second record for the islands.

Wren. Resident.

Fieldfare. One on Ruaival and in Village Glen on several dates between 20th and 27th Dec.

Song Thrush. Single birds on 10th and 28th Dec and on 4th Jan; two on 27th Dec. No other recent wintering records.

Redwing. Four or five wintered in the camp area and more arrived after the first week in Feb. Three wintered in Glen Mor, finding shelter in the Amazon's House and similar archaeological structures. All were very tame and probably of the Icelandic race "coburni." One trapped on 13th Feb had been ringed at Reykjavik in Sept 1961.

Blackbird. Four over-wintered in Village Glen; a male ringed on 7th Dec was seen or retrapped on several occasions until 24th Mar. One wintered in Glen Mor and one was seen on the Carn Mor on 4th Feb. All were very shy.

Rock Pipit. Very few winter; there were only about 20 birds on Hirta mainly in Village Glen but also on Ruaival and two or three in Glen Mor.

Starling. Probably many left the island. Except for the flock of about 50 in Village Glen, and a smaller number in Glen Mor, they were never seen around the cliffs in any numbers.

Twite. Wilson saw 8 on Dun on 24th Feb, a very unusual date as they are normally summer visitors only.

Snow Bunting. Up to five in the camp area in early Dec; two remaining until 15th. Single birds seen on 31st Dec and 1st and 2nd Jan; Wilson saw one on Mulloch Mor on 9th Feb.

ACKNOWLEDGMENTS

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FEEDING HABITS OF THE GREY LAG GOOSE *ANSER ANSER* ON THE ISLAND OF BUTE

JANET KEAR

At the request of the Nature Conservancy, the Wildfowl Trust carried out during the season 1961-62 a field investigation of crop damage by wild geese. In early February 1962, when the investigation was under way, a complaint was received from the Clyde Agricultural Executive Committee referring to the activities of Grey Lag Geese on grass and swede crops on the Island of Bute.

GREYLAG NUMBERS ON BUTE

The Greylag has been visiting Bute in the Firth of Clyde only recently. The Game Register of the Bute Estate includes one Greylag in 1920 and three in 1941—the next entry relating to this species. Berry (1939), discussing the distribution of wild geese in Scotland, does not mention Bute as amongst those localities used by Greylags although several fresh districts in Kintyre were being visited by flocks from 1920-1930. Stuart (1953) in an article covering the years 1938 to 1948 says "by 1938 several hundreds of these geese were wintering on the west side of the Island, ranging chiefly from Largizean to Scalpsie, although they also frequented Loch Fad and Quien and the west shore up to Ettrick Bay. Their numbers have now increased, and at times I believe there may be about 1000 on the Island." The opinion of farmers on whose land the geese feed is that the birds arrived in noticeable numbers between 1938 and 1940 but that the numbers remaining throughout the winter have risen slowly over the past ten years, with a sharp peak of 5000-7000 birds in 1961-62, The normal length of stay is from early October to April.

During the years since 1938 there has been a considerable extension of the population of Scottish Greylags across the mainland from the east coast and an increase in numbers visiting the west. At the same time, a drop occurred about 1945-46 in the numbers of geese wintering in Ireland, particularly in the region of the Wexford Slobs (Ruttledge and

Hall Watt 1958; Kennedy 1961). It is possible that the flocks which originally reached Ireland may now be seen as part of the increased population in Bute, Arran and Wigtownshire.

THE FOOD OF THE GREYLAG

The food of wintering Greylags consists in the main of grass and associated pasture plants and the young shoots of winter wheat. Grain of all kinds is eaten both on stubble and from the surface of newly sown fields. Potatoes, kale, beans and peas may be taken, although beans are grown infrequently now and peas sown rather too late in the year for the geese to attack. In eleven stomachs obtained in Scotland in winter the principal foods were grass, clover, and the roots of *Scirpus;* other items including *Equisetum,* fragments of green leaves and moss (Campbell 1947). These Greylag stomachs were however from Outer Hebridean birds and food conditions there are different from those found on the mainland. Dementiev (1952) says that Greylags dig up tubers and bulbs of steppe plants. Young rye, rice, maize, acorns, kitchen-garden plants and turnips are recorded as food of the continental Greylag by Alpheraky (1905) but none of these are known to be taken to any extent in the British Isles with the exception of the swede turnip on the Island of Bute.

FEEDING ON SWEDE TURNIPS

The geese roost on four lochs on the island and fly to the fields in the early morning or, rarely, where fields are cultivated to the water's edge, walk onto them. The diet of the geese during October and November is grass and the few potatoes left on the harvested fields, but the first snow or hard weather will send many to the swede fields. As with meadows, it is the centre of the field that is most likely to be utilised and those fields away from roads and buildings are particularly vulnerable, although geese are increasingly making use of loose swedes fed to stock. The tops may be taken at first but it is the roots which are the principal attraction. The farmers interviewed were quite certain that the geese took intact roots, not damaged or frosted ones, and indeed this seemed to be the case in the fields examined. The skin of the swede is not hard to break and with slight pressure can be scored by a finger nail; presumably the geese use the distal nails of mandible and maxilla. Their subsequent action can be described best as "gouging." The marks left on a large swede, as can be seen from the photograph (Plate 12), indicate clearly that the mandible is run in just beneath the surface and the sliver of flesh nipped off, probably with the combined action of tongue, lateral lamellae and nails. This may appear to be an unlikely technique for a grazing goose, but the Greylag is known to be versatile in its feeding behaviour. Large potatoes which are frozen into the ground are eaten in this way, although small ones can be bitten into pieces and probably some swedes are also. The hard weather of 1947, which lasted into April, produced a number of unusual complaints, and most cases of swede attack outside Bute occurred during that winter, although it is assumed that the crop had already been frosted. Mainland birds seldom continue these activities when their normal feeding grounds are free of snow and frost, but it may be that it was the long snowy winter of 1947 that started the Bute geese concentrating on roots. The other reports of geese occasionally eating swedes in good weather have come from the Loch Inch estate in Wigtownshire (where the geese involved may have been part of the Bute population), from Aberdeenshire, and from a few other places in Scotland where Greylags have been seen feeding on roots put out for cattle (Berry 1932; Campbell, pers. comm.; Berry, pers. comm.).

The value of swede turnip as a food compared with that of pasture grass can be seen in Table 1. The figures are taken from *Rations for Livestock*, Bulletin No. 48 of the Ministry of Agriculture and Fisheries.

TABLE 1

Composition of swede turnip and grass

	Swede turnip	Pasture		
		winter*	spring value	pasture grass¶
	%	%	%	%
Dry matter	11.5	20.0	20.0	
Crude protein	1.3	3.1	3.5	
Oil	0.2	0.6	0.8	
Carbohydrate	8.1	10.3	9.7	
Fibre	1.2	4.4	4.0	
Ash	0.7	1.6	2.0	2.0
Lime—CaO	0.08			0.28
Phosphoric acid—P^2O^5	0.08			0.16
Potash—K^2O	0.30			0.60
Chlorine Cl^2	0.04			0.19

*after close-grazing, allowing free growth from end of July to December
¶rotational close-grazing.

The dry matter content of grass is nearly twice that of swede turnip which is in turn higher than that of the soft-fleshed root known as a turnip in England. The swede variety suffers the most damage (the turnip is, in any case, not much grown in Bute) and there is some evidence to suggest that, where two varieties of swede are grown in the same field, the geese eat those roots with the normally higher dry matter content. This point requires further investigation. Where no alternative is offered, damage may occur irrespective of dry matter content. It is, however, sensible to assume that in order to get the calories they need, without overloading the digestive system with water, the geese can appreciate the "solidity" of their food. Very little is known about the nutritional requirements of a wild goose; with other birds which have been studied more fully it appears that the number of calories is of the greatest importance in governing total intake from different food sources (Gibb 1957). In these terms swede has approximately 70% of the nutritive value of winter pasture.

Both grass and roots are eaten by the Bute geese throughout the winter and there is no evidence to suggest that individual birds confine themselves to one or the other. An examination of the piles of droppings at the edge of Loch Ascog showed that at least for short periods individuals tended to eat only one type of food, and that approximately half the geese roosting here were feeding on swedes and half on grass. Winter wheat, a favourite item of diet elsewhere, is not grown in Bute.

In flocking birds, such as the geese, social factors must be especially important in governing feeding behaviour patterns. The possible range of feeding techniques is obviously dependent on the birds' physical structure, in particular the structure of the beak. A few individuals may, however, occasionally reveal new sources of food which can be successfully exploited, their actions are observed and local enhancement occurs. In this way novel habits are built into the social repertoire, being lifted over the limits of acquired behaviour which disappears with the death of the individual.

There are enough records of Greylags eating swedes to indicate that the habit arises fairly readily. A long hard spell causes further exploration, and if roots are available they will almost certainly be taken. Low nutritive value must normally be the swede turnip's best protection at other times, but the situation existing on Bute indicates that this protection is not always adequate. A regular diet consisting of sound swedes in combination with other items such as grass is obviously sufficient for the geese there.

AGRICULTURAL PRACTICE

Bute is approximately fifteen miles long and four miles wide. The arable land and the main roosting areas

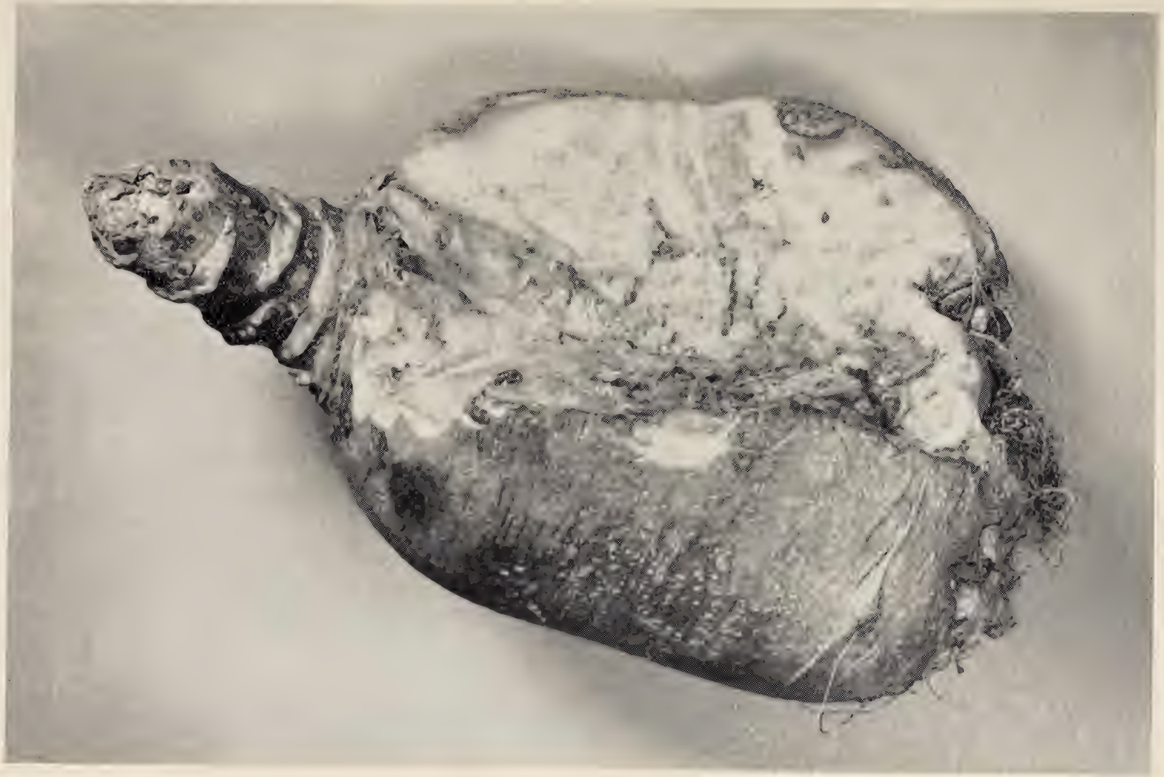

PLATE 12. Wilhelmburger green top swede, attacked by GREY LAG GOOSE. The semi-circular cuts made **by** the mandible can be seen around the edge, as well as the toothmarks left where the lamellae have nipped the flesh out.

are largely in the southern part of the island and the complaints of goose damage come from the parishes of Rothesay and Kingarth where 550-600 acres of swede turnips are grown. The swede is regarded as an essential winter feed, principally for dairy herds but also for store and fat cattle. Mangolds and fodder beet are more suited to the drier and warmer areas of England and are not grown on the island. It appears that the most popular swede for cultivation is the purple skin variety "Best of All." Four other purple types and "Wilhelmburger" green top are also grown. Two varieties, including "Best of All," are intended for early winter use, three for mid-winter, and the very hardy and disease resistant "Wilhelmburger" for the spring. The crop is left in the field much longer here than is normal in most of Scotland; in fact, until it is required. Bute (being a west coast island) does not suffer prolonged severe weather and root crops are less likely to be damaged by frost than they are elsewhere. It is felt locally that swedes keep much better in the field than they would if stored in bulk, and any surplus roots can be fed to sheep without extra labour. A portion of the crop may be intentionally left to "feed on" with sheep, a cheaper process than lifting, storing and carting out again, and better manuring for the land. This means that unusually large areas of swedes are available to the geese throughout the winter and spring. The same system is worked in Aberdeenshire (where geese and Whooper Swans have started to cause similar damage), partly because there is considerable growth in the crop in autumn and early winter, and partly because the climate enables the roots to remain sound and fresh. On the other hand, in Perthshire for instance, swedes do not keep well in the ground and must be lifted and stored in the autumn.

ACKNOWLEDGMENTS

I am grateful to the following for information: Dr J. Berry, Dr J. W. Campbell, G. Catto, R. K. Cornwallis, D. Kennedy, R. A. Milligan and Lord David Stuart. Permission was obtained from Her Majesty's Stationery Office for the reproduction of Table 1.

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ROSEATE TERNS BREEDING ON THE MAINLAND OF FIFE IN 1956

C. K. MYLNE

In Jack Grierson's paper on the birds of Tentsmuir, the record of Roseate Terns breeding on Shelly Point in 1956 is declared to be "quite unacceptable." It is stated that no nests were found and that only four Roseate Terns were seen; and furthermore that "nests which were marked and reported as those of Roseate Terns were in fact Sandwich Tern nests, and this was confirmed by several competent observers" (*antea* 2: 124).

My own notes tell a different story, and as the breeding of this species on the mainland of Scotland is a rare event a full account may be of interest. A preliminary report appeared in *The Edinburgh Bird Bulletin* (6:58), but on the advice of George Waterston fuller publication was withheld in case the birds returned. This did not happen, and these notes are offered with apologies to Mr Grierson for leaving the record incomplete for so long.

As Grierson points out, Shelly Point became the chief nesting ground of terns in the Tentsmuir area in the early 1950's, but increasing disturbance from visitors and especially from the airfield at Leuchars steadily reduced their numbers from 1953 onwards. In 1956 however there was one important new factor which lasted for only that one season. From 15th June the airfield was virtually closed to aircraft while the runway was being extended and strengthened. I visited Shelly Point first on 6th June when the Common Terns and Arctic Terns were laying. There were hundreds of pairs, and nests were thick on the ground. In the middle of this colony a group of Sandwich Terns formed a compact colony of 27 nests on the sand amongst clumps of sea rocket. Only three pairs of Roseate Terns were seen on this occasion, but with ten pairs of Little Terns nesting on the landward end of the sand-spit we only needed to find the first Roseate's nest to establish a breeding colony containing all five species of British breeding terns. This we were able to do on 1st July when I led an excursion of the Scottish Ornithologists' Club to the area by kind permission of Mrs Purvis. A number of Roseate Terns were seen sitting on the mud and a good many nests were found, several of them with eggs. The eggs are much smaller than those of the Sandwich Tern, and normally recognisable from those of Common and Arctic Terns by being longer and also more oval in shape. But there was plenty of other evidence that the Roseates were actually nesting. Whereas the Sandwich Terns were in a more compact colony with the scrapes mostly well out on the open sand, the Roseate Terns' nests were in a more scattered group nearby and much more under the cover of marram grass and sea rocket. I have a colour photograph of one such nest almost hidden in the cover. The behaviour of the owners was typical of terns over their breeding sites—noisy and attentive.

Once breeding had been established I revisited the colony several times during July, and identified 18 nests on the 6th—five with one egg, nine with two eggs, and four with three eggs. We did not attempt to make an exhaustive search as this would have involved too much risk to the birds. As it was, our presence caused bedlam overhead. Although individual Roseate Terns can quite easily be picked out in flight amongst a large number of other terns, estimating total numbers is much more difficult. After many attempts, the highest count of birds on the mud and in the air at any one time was 35, which suggested that our total of 18 nests was probably almost complete.

On 17th July seven of the nests still had the same contents as before, one had lost one egg, and the rest were empty. Although no young birds were found near the nests it is possible that the eggs had hatched successfully. Another three nests were found in new sites. The first young birds were found on this visit, one in a nest that had contained one egg earlier, and one in a nest with the other egg chipping. A photograph was taken of this nest as evidence, and this provides the best proof of breeding, since the chicks with their spiky down are quite unlike those of Common or Arctic Terns which might be hatched from eggs of comparable size.

As any chicks which hatched were clearly leaving the vicinity of the nests quickly it is not possible to estimate hatching success. To keep disturbance to a minimum checking the contents of the nests was done as speedily as possible and searching for young birds was out of the question. In five instances single young were found newly hatched and still in the nests. Two young from a clutch of two and one from a clutch of three were later found dead, apparently deserted by their parents. A clutch of deserted eggs found in August contained well-formed dead chicks.

To sum up—in 1956 all five species of British breeding terns nested at Shelly Point, probably because of the suspension of flying from Leuchars aerodrome. At least 18 pairs of Roseate Terns nested on the sand-bank, and 21 nests were found. At least 45 eggs were laid, and a few young birds hatched successfully, so that it seems likely that some at least may have fledged.

(It should be noted that this report is based on the personal observations of Mr Mylne, although his earlier report in *The Edinburgh Bird Bulletin* evidently contains some second-hand information. We showed the report to Jack Grierson and he has agreed to its publication. He writes that he visited the ternery on 25th June that year, and on a few subsequent dates. On 25th June he searched Shelly Point thoroughly and found nests of the other four species of terns but not of Roseate. Four Roseates were seen in flight but this is not very unusual at that time of year. We have seen Mr Mylne's photograph of egg and chick, dated 17th July 1956, and discussed the matter in detail, and we are satisfied that his report is correct. It should be noted that the period during which the birds were nesting was fairly short and that if the first chicks hatched about 17th July, rather than on 6th July as the earlier report suggested but about which there is now some doubt, then there is no conflict with Mr Mylne's report in the fact that no nests were found on 25th June, as there were probably no eggs then. Nests had been marked by that date, not by Mr Mylne, but these were, as Mr Grierson writes, those of Common, Arctic and Sandwich Terns.—Ed.).

WITHOUT COMMENT

"At first I strongly repudiated my husband's view that the harsh cry of our three-week-old daughter sounded like the cawing of a crow. Now I am not so sure. For the past four mornings her six o'clock call for food has brought a large crow hurrying to our bedroom window. There it sits, and together they squawk in what sounds like animated conversation."

—Letter to the *Sunday Express*, 1st July, 1962.

SHORT NOTES

SLAVONIAN GREBES BREEDING IN ABERDEENSHIRE

On 5th August 1962 a friend and I stopped to look at two artificially made lochans in Aberdeenshire. These have good areas of sedge growing in them. On open water by the road we observed a very small bird, and as we put up our glasses the parent bird surfaced from a dive. The chick was very small, with a striped head and neck, and except when actually being fed it continually made an extremely piercing noise. We immediately identified the birds as Slavonian Grebes—with which I am familiar at their breeding haunts elsewhere in Scotland. The adult bird was dark above, with a white wing patch, and its white underparts showed when it dived; neck, breast and flanks a rich pinky chestnut; face black with a wide upward-pointing band of bright gold—the colour of overripe corn—which ran upwards from the bill, through the bird's red eye. While we were watching, another chick arrived giving the hunger call the whole time, and later a second adult appeared and fed it. We saw all these birds again on the 7th, and watched another bird—a juvenile just starting to acquire the adult plumage—on the adjacent lochan on the 9th. I understand that this is the first time these grebes have been recorded breeding in Aberdeenshire.

MARGARET VEITCH.

SPOONBILLS IN DUMFRIESSHIRE

While watching waders at the mouth of the river Annan at about 1600 hrs on 26th May 1962, I noticed an unusual bird which I identified as a Spoonbill. The identification was confirmed by R. T. Smith the following day, by which time the bird had been joined by two others of the same species. All three birds stayed until 30th May and were seen by a number of members of the Dumfries Branch of the S.O.C.

The original bird was an immature, with a pinkish-orange bill and black wing-tips. The two later arrivals were both adults; they looked somewhat larger in size and had darker legs and noticeably black bills. Some observers were also able to make out short crests.

The birds fed standing in the water close to the shore, dipping their bills into the water and swishing them from side to side with a sort of filtering action. They appeared to be feeding on small crabs or other crustaceans trapped in the mud, and as they did so they were constantly harried by the larger species of gulls that normally feed at this point. Two of the birds were in fact eventually driven off to the main tidal channel several hundred yards away, giving us a picturesque view of their slow, effortless flight. These are the first Spoonbills to have been recorded in Dumfriesshire and the Solway area.

D. MANSON.

AGGRESSIVE BEHAVIOUR OF GOLDENEYE

In April 1962 I had the opportunity of watching the courtship and rivalry displays of three Goldeneye on a lochan near Applecross in Wester Ross. The trio was made up of a duck and two drakes, one of which was dominant (the first drake) and the other a weaker bird (the second drake). The first drake divided his attention almost equally between displaying to the duck and attacking the second drake. In the chases that followed these attacks, the second drake would often find himself temporarily beside the duck. He would then display briefly before being driven away, and the first drake would also display briefly as he passed the duck in hot pursuit of his rival. The second drake usually swam at some distance from the other two, who for the most part swam together. If he approached too close—nearer than 20-30 yards—the first drake would launch an attack. Sometimes the first drake would make a quite unprovoked attack. The attack took three different forms:

(1) The first drake would lower head and neck until they were practically touching the water and swim menacingly towards the second drake. Sometimes this produced a retreat. If so, the first drake returned to the duck: if not, the attack developed into the second form:

(2) The first drake would fly either over or along the water and peck viciously at any part of his rival, the typical whirring of the Goldeneye's wings sounding louder than usual and acquiring a significantly menacing tone. Sometimes this form of attack was used without the preliminary threat display.

(3) The third method of attack was underwater. The first drake usually waited until the second drake was not looking and then dived quickly and attacked from below at the feet or soft parts of the body. This seemed to be extremely effective, causing the second drake to fly off immediately. In fact, sometimes the second drake would see the initial dive and take immediate evasive action without waiting for the attack, in which case the first drake never changed his underwater course but always surfaced exactly where his rival had been floating. It was noticeable that the second drake never took advantage of the first drake's temporary disappearance under water to make for the duck, but always made off in the op-

posite direction. The first drake, therefore, never needed to follow up these underwater attacks.

These attacks were usually launched following or during a courtship display. Indeed the attacks may even have formed part of the display to the duck, as the first drake would sometimes go from courtship display into the first or second form of attack and then straight back again to courtship display without a break. The show of strength was probably just as important in attracting the duck as the display of his other talents.

When I flushed the birds, all three flew off together, both drakes trying to fly as close as possible to the duck. Even in flight the first drake continued to attack the second, buffeting him from time to time with a great clapping of wings. They flew off to another lochan, and when I looked at them again there six or seven hours later the first drake seemed even more possessive and cocksure and the second drake was skulking for the most part at the opposite end of the lochan. Occasionally the first drake would make a short sally at his rival and then return to the side of the duck, who now seemed much more responsive to him and was displaying almost as much as he was.

T. D. H. Merrie.

On 12th April 1960 I was watching a party of Goldeneye on Loch Morlich, in East Inverness-shire. The party was made up of six adults (apparently three pairs) and a number of immatures. Two of the drakes were engaged in a long fight. It soon became apparent that one of them was getting very much the worst of the fight and would fain have retired, but the stronger bird was not content with an acknowledgment of defeat and viciously pitched into the attack again and again every time the other bird tried to break off. All this time one of the ducks—which I took to be the mate of the weaker bird—circled anxiously round the two combatants as though longing to join in, though she never made any attempt to do so. The significant thing about this fight was that both birds appeared to be paired and that it seemed to be more in the nature of a territorial combat.

Although a good deal has been written about the courtship display of the Goldeneye—notably by Henry Boase (*Brit. Birds* 18: 69; *Scot. Nat.* 1950: 16)—little appears to have been published on the aggressive behaviour described above. All three species of the genus *Bucephala* seem to have this aggressive behaviour much more strongly developed than in the other ducks. Dr Bannerman (*The birds of the British Isles* VII: 136) quotes an earlier writer to the effect that the Buffelhead drakes "fight viciously among themselves for the possession of the females," and I have described elsewhere (*Brit. Birds*

53: 572) the vicious attacks made by a duck Barrow's Goldeneye on all other diving duck that trespassed on the pool where she had her brood.

D. G. Andrew.

KING EIDER IN SHETLAND

On 8th June 1962, and again on the 10th, I saw a drake King Eider at Gutcher, off the east coast of Yell. It associated with a large party of common Eiders which fed in the channel between Yell and Linga Island, and often spent long inactive periods on a sandy beach on the island. They did not come closer than about 250 yards, but the following details were clearly seen on the King Eider:

> Slightly smaller than the common Eiders; white foreparts; black belly; black upper parts with a white rather oblique line along the wings which showed as a white patch on the forewing in flight; white patch on the side of the body in front of the stern; head pale blue. Forehead steep; bill and frontal shield orange, but it was not possible at that range to see much more than the colour.

I gathered from residents that the bird had been there for several months, and had probably wintered in Shetland.

K. D. Smith.

(Over the years the King Eider has been noted quite a few times in Shetland waters, and in view of the difficulty of separating immatures and ducks among flocks of common Eiders it probably occurs more regularly than the published records show.—Ed.).

MERLINS TAKING NEWLY HATCHED PASSERINES

On 28th June 1962, in the Stewartry of Kirkcudbright, I found a pair of adult Merlins with four fully fledged eyeasses out of the nest. Prey remains on several nearby plucking stations were examined, and among these were found the fresh bodies of several passerine nestlings. These, probably Meadow Pipits, were blind and naked and obviously not more than about two days old. There is no mention in either *The Handbook* or Bannerman and Lodge's *The birds of the British Isles* of these falcons preying upon nestlings.

E. L. Roberts.

CRANES IN ABERDEENSHIRE

On 14th August 1962 H. D. Smith of Hillfold, near Kemnay, reported two grey birds, about four feet high, with long necks and legs, feeding in a field of growing barley near the farm. The following evening Miss E. A. Garden and my wife and I found them still there, and identified them as common Cranes.

We had good views from the car as they stood in the barley, and we noted their blue-grey plumage and slightly darker, drooping tails; head and neck dark slate-grey with very conspicuous pale line down the side of the neck from behind the eye, and a hint of red on the crown. In flight the neck was outstretched, and the black primaries were seen, as well as dark grey patches on the back and upper surface of the wings. No call was heard. The birds remained in the neighbourhood at least until the 16th.

A. Anderson.

(These Cranes were seen by various ornithologists, including Dr and Mrs David Jenkins who reported that the birds had been at first approachable to within about 100 yards but gradually became wilder. When approached they rose with a loud clanging call, showing separated primaries in flight and the silhouette of the characteristic loosely feathered tail.

We have heard also of two Cranes in North Fife in the spring but have not received details. Two are reported from Mainland and Yell in the Shetlands towards the end of May, and P. E. Davis tells us that what may well have been the same birds arrived at Fair Isle on the morning of the 29th and left again at noon to the south-east. Later, a single Crane arrived at Fair Isle on 19th July and was still there on the 23rd. These birds, and the Shetland ones of which we have received no details, will be recorded in the *Fair Isle Bird Observatory Bulletin.*—Ed.).

KENTISH PLOVER IN ABERDEENSHIRE

A Kentish Plover was seen by W. E. Pool and myself on 3rd and 4th May 1962 on the Ythan Estuary at Newburgh. I have previously seen Kentish Plovers in Majorca and Benghazi. When first sighted at some distance this plover stood out from the Ringed Plover with it because of its smaller size and much whiter appearance. Thereafter it was watched in good light at ranges down to 20 yards and the following features noted:

> Broken breast band; eye-stripe continued over eye; dark face and breast markings more finely marked than on Ringed Plover; white forehead more extensive than on Ringed Plover, and separated from sandy cap by black patch; dark legs noted; compared with Ringed Plover the dark bill was thinner and seemed relatively longer, and the colour of the back was sandier. Though the cap did show a slightly redder tint than the colour of the back this was less distinct than in certain illustrations. When standing with Dunlin it could be seen to be smaller, and it stood with tail cocked up in the air. In flight, which was most erratic, wing and tail markings seemed much as a Ringed Plover. No call heard.

A. G. Gordon.

(This record, which has been accepted by the Rarity

Records Committee of *British Birds*, is only the second of Kentish Plover in Scotland, the first having been seen at Fair Isle on 14th May 1949 (*Scot. Nat.* 1950: 24).—ED.).

UNUSUAL BEHAVIOUR OF BAR-TAILED GODWIT

On 21st May 1962 I flushed a Bar-tailed Godwit from saltings at Caerlaverock, Dumfriesshire, whereupon it at once began vigorously to mob my dog, diving repeatedly at his head for three to four minutes, and all the time uttering a loud, clear and sharp *"yow-kow"* note, no doubt corresponding to the barking calls mentioned in *The Handbook*. A passing Black-headed Gull then attracted the bird's attention, and it proceeded to mob this in similar fashion and repeating a similar call, until I lost sight of both.

E. L. ROBERTS.

COLLARED DOVES IN ORKNEY AND EASTER ROSS

On 23rd July 1962 a friend telephoned to say that there was a strange dove in his garden in St Margaret's Hope, South Ronaldsay. Mention of a narrow black half-collar sent me scurrying to investigate together with Miss D. Aitcheson. We had good views of the bird on the branch of a tree, on a roof-top, and in flight. Slightly smaller than nearby domestic doves it was mainly pale grey-brown—paler on head, neck and underparts, with a slightly pinkish or purplish flush on the breast—with blackish primaries and a narrow black half-collar round the back of the neck. The end half of the tail was white on the underside.

E. BALFOUR.

On 3rd August 1962 I had a telephone message from John Rhind in Invergordon to say that two strange pigeons had appeared in his garden and were feeding on newly sown grass seed. From his description I was able to confirm that these were collared Doves. Next morning an immature bird was seen in a tree nearby, and during August the adults were noted from time to time, with an immature bird again on the 28th.

I. D. PENNIE.

Following a report that up to about six Collared Doves had been seen feeding with poultry in the Tarbat district of Easter Ross during the previous two months, I visited the area on 29th September 1962 with two friends. No sooner had we halted the car beside the steading at Bindal Farm, two miles from Tarbat Ness Lighthouse, than we spotted a Collared Dove fly from a tree in an adjoining copse to the roof of one of the farm buildings. During the next half hour we watched three, possibly four, doves as they flitted about the copse. Although none of us had seen the species before, the diagnostic features, including the black half-collar, the darkish primaries and the prominent black and white under-tail pattern in flight, were unmistakable. Cooing was heard several times. Although the birds were quite approachable they nevertheless showed a certain degree of wariness. Growing in the copse was an almost impenetrable clump of sapling spruce trees, about 20 feet high, which appeared to be an ideal breeding retreat for the birds.

D. Macdonald.

(These are the first records for Orkney and Easter Ross, and indicate that the spread of the Collared Dove in Scotland continues. We have heard reports of birds which were clearly Collared Dovies in other new localities this year, but sometimes it has not been possible to obtain sufficent proof of identity for the records to be published in *Scottish Birds*. Any information will, however, be very welcome, and will help to build up a valuable picture of the spread of this species.—Ed.).

LITTLE OWL IN DUMFRIESSHIRE

On the morning of 26th April 1961 my wife and I were driving past Carrifran in the Moffat Water Valley, when we noticed an owl sitting on the dry-stone dyke of a sheep pen. We were immediately struck by its small size and generally spotted appearance. We stayed in the car and were able to get an excellent view of the bird. Its general colouring was greyish-brown; the face greyish-white; breast spotted and barred brownish; and belly whitish, showing up conspicuously in flight. The bird frequently turned its head, and when it did so it appeared to have a light collar. I estimated it to be about the same length as a Blackbird, although it was of course a much more thick-set bird.

After studying the bird for some time, I opened the car door to observe the flight. The bird flew with short, rapid wing-beats, keeping very low with a short glide after each flight, and it settled on a rock after flying only about 40 yards. When I flushed it again, it behaved in the same manner. I followed it for about 200 yards as it flew from rock to rock.

The bird's small size, appearance and behaviour left no doubt that it was a Little Owl. This is my first record for the district and appears to be only the second for the county. One was trapped at Caerlaverock in 1951 (*Scot. Nat.* 1951: 189).

E. Dicerbo.

ALPINE SWIFT IN SHETLAND

On 13th June 1962 I saw an Alpine Swift hawking insects in the geos at Herma Ness, Unst. Close views down to twenty yards were obtained. No other bird comparable in size was near, but it was obviously a large swift, brownish on the upper parts, with a white belly and throat, and brown chest band. I am very familiar with the species in countries where it breeds. There does not appear to be a previous record for Shetland.

K. D. Smith.

SOME BREEDING NOTES ON THE TREECREEPER

The following notes refer to observations made at a long-established nest site of the Treecreeper in a garden toolshed at Dornoch, Sutherland, during the period 1950 to 1962. The owner of the property has informed me that Treecreepers have used this nest site at irregular intervals for over 30 years. The nest is placed at a height of about 7 feet behind the wood frontage of the shed and is wedged into a space between an upright wooden post and the brick wall of an adjoining outhouse. The birds obtain access through a narrow crevice which has opened up between the two sheds. The foundation of the nest consists of a huge accumulation of tiny twigs and wood chips, the entire bulk extending to a depth of 12 inches and protruding 9½ inches inwards towards the interior of the shed.

During the 13 years that I have had this nest under observation Treecreepers have nested in it five times—in 1950, 1954, 1956, 1958 and 1962. In 1953 the birds repaired the structure but forsook it after having completed the lining of the nest cup.

Nest building mainly consisted of adding a fresh nest cup on top of the massive foundation pile. The beginning of operations varied from late March to early May, and generally took about 14 days to complete. On one occasion I watched a Treecreeper pull off decayed strips of wood with its bill from a rotten branch which lay on the ground about 15 yards away from the nest site. The wood strips which the bird was seen to carry to the nest were 1 to 2 inches in length, but amongst the nest material I found one particular strip measuring 5 inches, the same length as the bird itself. The nest cup was always lined first with tiny wood chips, occasionally intermingled with small lumps of wool, and finally covered over with feathers.

The clutch size and the dates of completion were as follows:

1950—6 eggs by 23rd April.
1954—6 eggs by 26th April.

1956—6 eggs by 16th April—early, according to *The Handbook*.
1958—5 eggs by 10th May.
1962—6 eggs by 29th April.

In four of the five years the incubation period agreed with the 14-15 days given in *The Handbook*. In 1956, however, a bird was still incubating at 08.30 hours G.M.T. on the 16th day after the completion of the clutch, but by 16.30 hours G.M.T. on that date incubation had ceased and the eggs were cold. By the following morning it was obvious that the clutch had been deserted and all 6 eggs were found to be infertile. It is interesting to note that incubation continued for only one day beyond the recognised period. Apart from this clutch and two addled eggs in the 1954 clutch, all the eggs hatched out.

In the four years in which broods were reared there were no cases of nestling mortality and 21 nestlings were fledged successfully. The fledging period, which *The Handbook* gives as 14-15 days, was ascertained on three occasions. In two of those years the young left the nest on the 16th day after hatching and in the other year on the 17th day. The secure position of the nest site might account for such prolonged fledging periods.

D. MACDONALD.

YELLOW-BROWED WARBLER AND TAWNY PIPIT IN LEWIS

On 6th October 1961 I watched a Yellow-browed Warbler in Western Lewis for nearly an hour while it flitted about in some conifers and at times hovered in front of the branches. It was quite tame, and not much bigger than a Goldcrest with which it occasionally associated. The general impression was of a small green-yellow leaf-warbler with prominent double wing-bar, dark eyestripe and yellow superciliary.

On 23rd October 1961 in Western Lewis I had brief views of a Tawny Pipit on the grass outside my window. At first glance I had mistaken it for a female Yellow Wagtail. It was much larger than a Meadow Pipit and stood very upright with its head held high. The nape and back were rather pale uniform buffish brown and unstreaked, and the underparts were pale buff and completely lacking any dark streaks. The crown was dark brown and there was a dark mark through the eye and a pale buff superciliary. By comparison with a Meadow Pipit the tail was longer, the yellowish legs were long and fairly sturdy, and the bill also looked rather larger. The bird flew up onto the edge of the roof and was lost round the far side of the house in the westerly gale which was blowing. I am familiar with Tawny Pipits abroad.

STEPHEN L. B. LEE.

(Sketches and full descriptions of both these birds have been submitted, and the records have been accepted by the Rarity Records Committee of *British Birds*. The Tawny Pipit does not seem to have been recorded previously in the Outer Hebrides. Readers will have seen reports in the press of the tragic death of Mr Lee on 21st April 1962—at the age of 22—at Gallan Head in Western Lewis.—Ed.).

ROSE-COLOURED STARLING IN FIFE

At Lundin Links on 6th September 1962, while having tea in my sun porch, I noticed an unusual bird with a flock of about 25 immature Starlings feeding on the golf practice ground on the other side of the road. I could see a black head above a pale breast appearing over the top of a knoll, and identified it as a Rose-coloured Starling. I contacted Miss P. G. Baxter who came at once and we watched the bird together.

It was the same size as a common Starling but looked stockier. The lower breast, belly, flanks, mantle, back and rump were pale rosy-pink; head, nape, throat and upper breast glossy black with a tinge of purple; feathers of the nape forming an inconspicuous crest; wings black with a suggestion of brown, and in flight appearing paler at the tips; tail seemed shorter and squarer than a Starling's, and was black, tinged brown like the wings, and buff tipped; the bill, rather shorter than a Starling's was pinkish brown, and the legs reddish-brown but paler than a Starling's.

The Rose-coloured Starling usually kept to the edge of the flock and tended to wander a little on its own, but followed the others when they flew, sometimes being a step behind. The flock was restive and kept flying from place to place so that it was impossible to get close to the bird. It was seen again next morning, but not after that.

R. S. Weir.

ARCTIC REDPOLL IN LEWIS

A male Arctic Redpoll in spring plumage, picked up at Uigen in West Lewis on 8th April 1962, was sent to Glasgow Art Gallery and Museum by W. A. J. Cunningham of Stornoway. The bird was made into a cabinet skin by James Fraser.

Mr Cunningham considered it to be an Arctic Redpoll of the race known as Hornemann's Redpoll *Carduelis h. hornemanni*. With the Hon. Douglas Weir (who made two watercolour sketches) I examined it at the museum, and we concluded that Mr Cunningham was correct. The skin was sent to Kenneth Williamson, Migration Research Officer of the British Trust for Ornithology, who replied that "the bird is undoubtedly *hornemanni,* the high-arctic form . . . I make the wing (without stretching) a minimum of 79 mm which is outside *hornemanni* range, but just in *exilipes* range, as given in the *Handbook*. However, a larger series measured by Dr F. Salomonsen (*Birds of Greenland* p. 502) gives *hornemanni* as 77-83 mm." *C. h. exilipes* is the race of the Arctic Redpoll known as Coues's Redpoll. Mr Williamson calls attention to his recent paper (*Brit. Birds* 54: 238-241) in which he follows Salomonsen in regarding all redpolls as conspecific.

C. E. PALMAR.

(This is apparently the first record of the Arctic Redpoll in the Outer Hebrides.—ED.).

RED-HEADED BUNTING ON LITTLE CUMBRAE

On 11th June 1961 on the island of Little Cumbrae, Bute, I was crossing an area of bracken and low trees when a small brown and yellow bird flew from a tree across my path and into a bush nearby. It gave me the impression of a very brightly-coloured Yellowhammer. When I flushed it, it flew to the leafless branches of a small elder, and perched where I could watch it. It fluttered its wings and shook out its feathers and I was able to see that the underparts were bright yellow extending to the tail. The head was copper-red and it looked as if the bird was wearing a helmet. There was a dark yellow band at the nape of the neck, between the head and the brownish mantle. The wings were brown with darker stripes, and the general impression was of a red, yellow and brown bird. I consulted the *Handbook* when I returned home, and am satisfied that the bird was a cock Red-headed Bunting. In view, however, of the remarks in *British Birds* (54: 196 and elsewhere) I can only regard this bird as an escape, and accordingly it is reported as a matter of interest only.

N. F. STEWART.

(The Rarity Records Committee of *British Birds,* to whom we are indebted for the record, have accepted it subject to the proviso that the bird was almost certainly an escape—one of the great number of male Red-headed Buntings imported each year. It should therefore not be regarded as a new species for Clyde.—ED.).

CURRENT NOTES

(**Key to initials of observers :** G. H. Acklam, A. F. Airey, D. G. Andrew, W. Austin, G. H. Ballantyne, J. Ballantyne, Miss P. G. Baxter, T. H. Bell, H. Boase, T. Boyd, R. G. Caldow, S. J. Clarke, Miss M. E. Cotton, Mrs A. Cunningham, W. A. J. Cunningham, R. Darroch, G. Dick, Sir R. Erskine-Hill, H. Ford, Miss E. A. Garden, H. Halliday, M. J. Henderson, Miss M. C. Hill, J. A. D. Hope, J. Hoy, Rev. G. T. Jamieson, R. A. Jeffrey, Dr D. Jenkins, Mrs M. Jenkins, N. Langham, D. G. Long, A. J. B. Loudon, A. Macdonald, D. Macdonald, M. K. Macduff-Duncan, K. S. Macgregor, A. T. Macmillan, T. D. H. Merrie, R. I. Milne, W. Murray, J. S. Oliver, G. L. A. Patrick, N. Picozzi, J. Potter, R. M. Ramage, G. A. Richards, W. K. Richmond, E. L. Roberts, I. B. Roy, G. L. Sandeman, J. Shanks, W. M. Skene, P. J. B. Slater, K. D. Smith, M. L. Smith, P. J. S. Smith, R. W. J. Smith, Dr T. C. Smout, D. Stalker, R. Stewart, M. Swales, C. Tait, D. G. Tweedie, A. D. Watson, Dr R. S. Weir, T. Weir, D. P. Willis, J. G. Young.

Unless otherwise stated, all dates refer to 1962.)

Distribution

This section deals with observations from 1st June 1962, and therefore includes very little on spring migration. Older records are given in another section, and only included here in amplification of current observations or with reference to the present status of a species.

Small numbers of **Great Northern Divers** are to be found every summer off the north-west coast of Scotland, but records of birds on fresh water are less common and it is of interest that a bird in full breeding plumage was watched at close range on a small loch in Sutherland on 25th June (JS, PJBS). At Loch Lomond on 2nd September two were diving close to the Dunbartonshire bank—one being still in summer plumage (DS, TW). On 12th July a **Black-throated Diver** was seen on a loch on Islay, and next day two on another loch. In spite of rumours, this species has not yet been proved to breed on the island, and these were evidently immature birds (CT).

There were nine **Great Crested Grebes** on the Tay at Port Allen, Perthshire, on 9th June—an unusual date (HB), and four were seen in the Achiltibuie district of Wester Ross—where it is a rare bird—on 4th September (MS). A juvenile **Red-necked Grebe** was at Gullane Point on 2nd September (TDHM), and an adult, moulting from summer plumage, off Cramond on the 8th. The observer comments that, from the published details, most of the early autumn birds recorded in the Forth seem to be adults (TCS). A **Black-necked Grebe** was at Hule Moss, Berwickshire, on 3rd July (DGL).

In the Forth in 1962 the **Fulmar** bred for the first time on Inchgarvie (*antea* 2: 201), and also on the Lamb, where an adult was brooding a small chick on 20th July (ATM). A "blue" Fulmar, of James Fisher's "D" colouring (see *The Ful-*

mar p. 268), was seen during July at the Brough of Birsay, Mainland of Orkney (GAR, MLS).

A count of 44 **Herons** in Montrose Basin on 14th August was an advance of four on the total of 13th September 1960 (*antea* 1: 384) (HB).

A big influx of **Mallard** to the area is indicated by a count of 800 at Cramond, Mid/West Lothian, on 15th September, against 60 a week earlier at the same state of the tide (TCS). A duck **Gadwall** was at Gladhouse, Midlothian, from 29th April to 13th May, but no drake was seen and there was no breeding (DGA). A pair was near the Butt of Lewis on 23rd August, the species being rare in Lewis and not known to breed in the Outer Hebrides (NL). Parallel with the influx of Mallard at Cramond there was a big influx of **Wigeon** at Barnbougle, West Lothian, where 300 were counted on 15th September, against six a week before, and compared with a maximum of 30 during the previous winter (TCS). On the 21st there were 1,500 in Montrose Basin (HB).

A drake **Scaup** was on a loch on Islay on 16th and 21st July, but there was no evidence of breeding (ADW). At Hule Moss a drake was seen on 12th August (SJC, MJH, DGL), and there were up to 16 on the sea at Carsethorn, Kirkcudbrightshire, on 20th August (THB). The **Tufted Duck** is a rare breeding bird on Islay (*Scot. Nat.* 1954: 144), and it may therefore be of interest to note three drakes in eclipse plumage on Ardnave Loch on 16th and 21st July, and seven drakes in eclipse and a duck on Loch Gorm on the 21st (ADW). In West Fife, at Peppermill Dam, where breeding has not been previously recorded, a brood of four ducklings was seen on 5th September, and the birds could not have been hatched for more than a few days (GD, JP). **Goldeneye** are believed to summer regularly at Loch Leven, Kinross-shire, as an odd immature drake is usually seen by St Serf's Island on visits in May and June; this year two were seen on 2nd June, and one on 14th July (TB, RWJS). Fifty half-grown juvenile **Shelduck** were counted in the Almond estuary with 12 adults on 28th July. They were too small to have come far and must have been bred locally, possibly on Cramond Island, Midlothian, where they have nested before, but most of them probably along the West Lothian shores, where three pairs were noted near Barnbougle in May and June, and one pair at Hopetoun throughout May. There is no breeding record for West Lothian, and these observations cannot be regarded as formal proof of nesting there (TCS).

In the last issue we gave various records of geese in May and June (*antea* 2: 202). At Loch Leven, Kinross-shire, there are usually a few injured birds in summer—*e.g.* three **Grey Lag Geese** and two **Pink-footed Geese** on 2nd June. Two Pinkfeet, of which at least one was a pricked bird, spent the whole summer at Gladhouse, though they could both fly (DGA, RWJS). There were five Grey Lags at the Loch o' the Lowes, Perthshire, on 26th June, and eight off Bowgavie on the 27th (HB), and three at Barr Loch, Renfrewshire, on 22nd July (GHA). A single Pinkfoot was at the mouth of the North Esk, Angus, on 17th June (HB); one was at Hule Moss on 11th August (SJC, MJH, WM), and one flew past Quothquhan, Lanarkshire, on the 18th (RE-H)—both more likely to have been birds left behind in the spring than early arrivals.

On 1st September there were six **Grey Lag Geese** at Kingoodie, Perthshire (HB), and on the 13th there were 28—the first of the autumn—feeding in pasture near Annan, Dumfriesshire (AFA). On Deeside they arrived on the 20th (DJ).

There was apparently a fairly widespread arrival of **Pink-footed Geese** on Monday 17th September, judging from the number of reports sent in, and this is early for these birds. The records below give a picture of this arrival. In some instances the identity of the birds can be presumed, although the observers only identified them as "geese."

12 Sept—Keepers at Gladhouse saw first flock passing south—birds seen circling the reservoir on the next few days (per RWJS).

14 Sept—34 in Fife (per Wildfowl Trust).

17 Sept.—Small skein over Contin, Easter Ross (JB); noted over Dundee (HB); 50 at Lindores, Fife (RSW); 40 and 25 flying over Skinflats, Stirlingshire, towards L. Leven (RWJS); 60 at Loch Leven (HB); first small parties at Libberton, Lanarkshire, and over Dalveen Pass, Dumfries/Lanarkshire (RE-H); 25 flying east over Buchtrig in the Cheviots, Roxburghshire (DGT per DGA).

18 Sept.—30 flew over Lindores Loch, Fife, and 350 at Loch Leven (PGB); 100 flying south over Colinton in the morning (per ATM).

The status of the **Canada Goose** in Scotland seems to be something of a mystery. Two pairs were noted on 13th June, with broods of three and five goslings respectively, at the Park Loch, Mellerstain House, near Kelso (AFA). A most unexpected flock of 72 birds was seen at Loch Leven on 5th September (DGA).

Counts of 448 **Mute Swans** on Loch Leven on 13th August, and 174 in Montrose Basin next day, are illustrative of the large numbers to be seen at these places at that time of year (HB). There are quite a few further notes on **Whooper Swans** seen in summer to add to those already published (*antea* 2: 204):

Loch Ken, Kirkcudbright—up to 4 remained during June and at least part of July—all had rather pale bills and were probably not fully adult (ADW), a comment which may well apply to others noted as adult birds.

White Loch, Renfrew—3 still there on 8th July, but not on the 11th or later (GHA).

Loch Leven, Kinross—1 on 2nd June and 14th July probably spent summer there (TB, RWJS).

Loch Lomond—4 adults may have summered, being noted by various observers on 7th, 8th and 15th July and on 1st, 2nd and 6th September (GHA, AJBL, DS, TW).

Near Crinan, Argyll—1 adult on 11th August (GHA).

Dunalastair Reservoir, Perth—2 on 6th June (HB), and on 20th (WKR).

Ythan Estuary, Aberdeen—2 on 28th July (JB).

First autumn reports of Whoopers are of three which walked ashore at Crombie Point, Fife, from a very rough sea on 16th September (GD, JP), and of one at the Livingstone end of Loch Ken on the 22nd (AFA).

At Addiewell, Midlothian, a **Buzzard**—the first the observer has seen there—was being mobbed by three Carrion Crows on 23rd September (HH), on the 17th one was at Lindores, Fife (RSW), and during the second half of the month there was quite an influx at Gartocharn, Dunbartonshire, with up to five at once over Duncryne Hill (TW).

A female or immature **Marsh Harrier** was seen hunting over rough ground on Jura on 27th July, and again two or three days later (RD), and a very dark bird at the Loch of Strathbeg, Aberdeenshire, on 6th September quartering the reed beds and putting the ducks into hysterics (EAG). Single female or immature **Hen Harriers** were at Gladhouse on 26th August (DGA), and at Dumbarnie Links, Largo, Fife, on 2nd September (GHB). An **Osprey** was watched at Borve, Harris, on 23rd June as it stooped at a sea trout in the river (per WAJC).

Quail have been heard calling during recent summers near Gifford, East Lothian (see *antea* 1: 459), and this year they were again present, being last heard early in August. We have previously expressed some doubts about the status of birds heard near Dirleton because imported eggs were incubated at Archerfield in 1959 under bantams (*loc. cit.*), and a record of one calling during 1961 at Queenstonbank Farm has not been published for that reason. R. E. Moreau now writes that these birds "will certainly be wild ones because the imported eggs are of Japanese stock, and the birds make a totally different noise—a raucous '*baba-broaak*' which one would never associate with a European Quail. I know these originally from having heard them at a Quail 'farm' in Wiltshire and then by checking with tape records of Japanese Quail, both wild and commercial, received from Japan" (per AM).

An inland record of **Turnstone** is of one at Gladhouse on 22nd July (DGA). A count of 20 **Whimbrel** at Barns Ness, East Lothian, on 29th July is high for the Forth (AM).

Black-tailed Godwits are reported from:

Invergowrie Bay, Tay—1 on 23rd Sept (HB).

Eden Estuary, Fife—1 on 28th Aug, and 40 on 29th/31st (RIM).

Skinflats, Stirling—1 on 8th/9th Sept (GHA, GD, GLAP, JP).

Carsethorn, Kirkcudbright—up to 5 on 28th Aug (THB).

One hundred **Bar-tailed Godwits** at Caerlaverock on 11th June were probably late passage birds, as fairly large parties do pass through the Solway in May or June in most years (ELR). Fifteen flying over Ardmore Bay, Dunbartonshire, on 1st September are described as an unusually large number for the area (TDHM).

The following **Green Sandpipers** are reported:

R. Dee, Crathes Bridge, Kincardine—1 on 17th Aug (DJ).
Kerloch Hill, Kincardine—1 on rain-water pool on heather moor on 7th Aug (DJ). This is the first record for North Kincardine.
Kingoodie, Perth—1 on 21st/22nd July (HB).
Moor Loch, Tullieallan, Fife—1 on 5th Sept (GD, JP).
Tyninghame, East Lothian—1 on 5th Aug (TB, IBR, WMS, RWJS).
Rosebery Pool, Midlothian—1 on 8th July (DGA).
Gavinton, Duns, Berwick—1 on 7th Aug (DGL).
Bell's Burn, Manderston, Duns—returned to this wintering area on 12th Aug and constantly present until time of writing (12th Sept), with 4 on 19th Aug, and 5 on the 25th (SJC). A photograph of one of these birds appears in this issue of "Scottish Birds."

The only **Wood Sandpipers** reported are three or four in a marsh near Troup Head, Banff, on 21st August, and about four near Fraserburgh, Aberdeenshire, the same day, and two or three there until the 25th (GLS). There is no previous record for Banff.

Counts of **Redshanks** in the Almond Estuary on 4th August (750), and in September on the 8th (1,000), 15th (900), and 29th (600), are worth contrasting with a peak of only 125-200 at Aberlady Bay further down the Forth, the two areas being similar in size (TCS).

Many more **Spotted Redshanks** than usual were seen this autumn, being recorded at many places between 4th August and 22nd September:

Skibo, Dornoch Firth, Sutherland—1 on 20th Aug (DM).
Near Fraserburgh—1 on 21st Aug (GLS).
Pennan Head, Aberdeen boundary—7 at roadside pool on 21st Aug (GLS).
Near Troup Head, Banff—3 on 21st Aug (GLS).
Mouth of R. Spey, Moray—1 on 18th Aug (GLS).
Eden Estuary—1 on 28th and 31st Aug (RIM).
Fife Ness—1 on 4th Sept (PGB).
Cult Ness, Rosyth, Fife—1 on 28th/29th Aug and 5th September (GD, JP, PJSS).
Crombie, Fife—1 on 15th Sept (GD, JP).
Barns Ness, East Lothian—1 on 12th and 18th Aug (AM).
Tyninghame—1 on 19th Aug (IBR, WMS, RWJS).
Barnbougle, West Lothian—1 on 4th Aug, and 1 on 15th Sept (TCS).
Skinflats, Stirling—1 on 25th Aug, and 8th, 17th and 22nd Sept (GD, JP, RWJS).
Hule Moss, Berwick—1 on 4th/5th Aug (SJC, MJH, DGL).
Cummertrees, Dumfries—1 on 11th Sept at Priestfield Flow (AFA).

The first **Greenshanks** of the autumn were reported at Port Allen, Perthshire, on 6th July (HB). This is not a rare bird on autumn passage, but the localities of some inland reports may be of interest:

Tulliallan, Fife—3 at Peppermill Dam on 14th Aug, and 1 on 5th Sept, when there were also 4 at Moor Loch (GD, JP).
Gladhouse—2 on 26th Aug (DGA).
Rosebery Reservoir, Midlothian—3 on 29th July (RWJS), and 1 on 2nd Sept (DGA).
Portmore, Peebles—3 on 12th Aug (RWJS).
Clyde at Hamilton, Lanark—1 on 18th Aug, 2 on 8th Sept, and 1 on the 15th (GHA).
Glenburn Reservoir, Paisley, Renfrew—1 on 7th Aug (RGC).
Lochgoin Reservoir, Renfrew—1 on 14th Aug (RGC).
Craigendunton Reservoir, Ayr (a mile from above)—3 on 14th Aug (RGC).
Watch Reservoir, Berwick—2 on 8th Aug (DGL).
Hule Moss—1 on 31st Aug (DGL).

A **Knot** was seen inland at Gladhouse on 4th August (RWJS), and there was one at Loch Lomond on the Dunbarton bank of the Endrick on 15th July, and no fewer than 20 on the 22nd—a large number inland (DS).

There are only a few reports of **Little Stints**:

Bay of Birsay, Orkney—1 on 6th Sept (PJBS).
Dornoch Point Saltmarsh, Sutherland—1 on 3rd Oct (DM).
Cairnbulg Point, near Fraserburgh—4 on 21st and 23rd Aug, and 6 on the 24th (GLS).
Aberlady Bay—1 on 27th Sept (JADH).
Gladhouse—1 on 19th Aug (DGA).

Curlew Sandpipers have also been scarce:

Near Fraserburgh—1 on 23rd and 25th Aug (GLS).
North shore of Tentsmuir, Fife—3 on 22nd Aug (RMR).
Aberlady Bay—1 on 13th Sept (AM, GLS), 1 on the 16th (GHA, GLAP), and at least 3 on the 27th (JADH).
Port Seton, East Lothian—1 on 7th Sept (MCH).

Two **Sanderlings** were inland at Gladhouse on 4th August (RWJS). Records from areas where they are described as uncommon are of one near Aultbea and three at Gairloch Bay, both Wester Ross, on 21st September—remarkable also because not a single Dunlin was seen that day in the area (JB); one in the upper Forth Estuary at Longannet on 15th September (GD, JP); and in the Solway, at least six near Southerness on 20th August, one at the Sands of Luce on the 29th (THB), and 30 at Dornock, Dumfriesshire, on 14th September (AFA).

Ruff are reported in many places from 13th August onwards:

Sumburgh, Shetland—2 with Lapwings on 4th Oct (PJBS).
Twatt, Orkney—9 in grassy field on 8th Sept (PJBS).
Dornoch Point Saltmarsh—1 on 26th Aug (DM).
Near Fraserburgh—50 or more, 20th/28th Aug (GLS).
Kinnordy, Angus—3, probably 5, on 22nd Aug (HB).
Longforgan Station, Perth—1 on 7th Sept (HB).
Eden Estuary—1 from 30th Aug to 1st Sept (GD, RIM, JP).
Cult Ness, Fife—6 on 28th Aug, and 1 on 5th Sept (GD, JP).
Tyninghame—1 on 19th Aug (TB), and 1 on 16th Sept (IBR, WMS).
Aberlady—counts on Aug 13th (1), 16th (2), 18th (10), 19th (5), 27th (2), 28th (1), and Sept 13th (2) (TB, HF, DGL, AM, RWJS).
Skinflats—counts on Aug 13th (4), 25th (4), Sept 17th (3), and 22nd (3) (GD, JP, RWJS).

Low Parks, Hamilton, Lanark—2 on 18th Aug, 10 on 8th Sept, and 4 on the 15th (GHA).
Cummertrees, Dumfries—3 on 11th Sept (AFA).
Caerlaverock, Dumfries—4 on 23rd Aug (WA, THB).
Loch Ryan, Wigtown—1 on 12th Sept (PGB).

Four **Arctic Skuas** at Longannet, Fife, on 14th July are the earliest the observer has seen there (JH), and Arctic Skuas were seen at Aberlady about the same time (KSM). There were several near Inchmickery on the 17th and this is probably the normal time of arrival in this part of the Forth (ATM). Numbers at Aberlady were unusually high during the autumn, with 12 on 19th August (JB) and at least 20 on 2nd September flying past Gullane Point (TDHM). Further up the Forth at Cramond the peak count was about 10 on 15th September (TCS).

Herring Gulls were nesting in 1962 on the cliffs at the mouth of the North Esk, Angus/Kincardine border; they had not been there in 1952 (HB). On 27th August 100 **Common Gulls** passed SW in 1's and 2's at Easthaven, Angus (HB). A **Glaucous Gull**—in its 4th summer to judge from its plumage—was seen intermittently in Ayr harbour from 27th May to 13th July (JGY). Further immature **Iceland Gulls** are reported (see *antea* 2: 207)—a 1st winter bird at Sheigra, West Sutherland, on 14th May, a 2nd winter bird in Aberdeen harbour on 21st May (KDS), and an immature in the fish market at Peterhead, Aberdeenshire, on 13th July (DPW). There is no previous record for West Sutherland.

A juvenile **Little Gull** was at Cult Ness on 25th September (GD), and small numbers of this species were seen at their usual haunts near Elie and Lundin Links during the autumn, with up to eight frequenting Kilconquhar Loch at the end of August and during September (PGB, RSW). The **Kittiwake** is a very scarce bird away from the sea, and 20 flying east down the R. Feugh at Strachan, Kincardineshire, during the morning of 30th September may have been blown right across the country by the tremendous SW winds at that time (DJ).

Unusually many **Black Terns** occurred, mainly in southern Scotland, in the middle of August, and during September. All the birds noted below were specifically identified, except that the birds in West Lothian and Kirkcudbrightshire, and those at Tyninghame on 30th September, were not seen clearly enough to eliminate the slender chance that they could have been White-winged Black Terns. The records cover no fewer than nine different sightings:

16 Aug—1 at mouth of R. Spey, Tugnet, Morayshire (GLS).
—1 at Aberlady, East Lothian (DGL).
18 Aug—1 at L. Morlich (RHD(ennis) in "The Scotsman" 1st September 1962). Details of identification are given. There is no previous record for East Inverness.
—1 over the Clyde at Hamilton, Lanark (GHA).
6 Sept—1 at Kilconquhar Loch, Fife (PGB).

15 Sept—1, probably 2, at Barnbougle, West Lothian (TCS).
16 Sept—1 flying NE up coast at Tyninghame, East Lothian, with Common/Arctic Terns (TB, IBR, RWJS).
30 Sept—2 in distance at Tyninghame (RWJS).
—1 at Carsethorn, Kirkcudbright (PGB).

A **Common Tern** on the Tweed between Walkerburn and Innerleithen on 21st June was the first the observer had seen in Peeblesshire (JB). **Common/Arctic Terns** are not often seen in the Glenkens district of Kirkcudbrightshire in autumn, but on the night of 3rd/4th October their calls were distinctly heard over Dalry (ADW). A **Sandwich Tern** flew south quite low over Warrender Park Road, in the centre of Edinburgh, at 1030 hours B.S.T. on 30th September (TCS).

Surprisingly *The Birds of Aberlady Bay Nature Reserve* notes only four occurrences of **Puffins**—all in winter. On 8th July a total of 97 birds, in 29 parties, flew east past Aberlady Point, a few landing and diving there. A fair number of Guillemots, as well as Gannets, Kittiwakes and a few Fulmars, also passed. A moderate SE wind with sea fog was probably mainly responsible for the birds coming up the Forth, but these figures also reflect the much greater numbers of Puffins at Craigleith this year (see *antea* 2: 208) (RWJS).

Details of the first occurrences of **Collared Doves** in Orkney and Easter Ross appear elsewhere in this issue of *Scottish Birds*. There were several in and around Stornoway during the summer, and an injured bird was found at Ness, near the Butt of Lewis, in June (WAJC). A well marked adult, and two duller birds which came separately, had been visiting a garden in Mayfield Terrace, Edinburgh, for two to three months at the time of writing (9th October) (MEC). This is not far from where Collared Doves were recorded last year (*antea* 1: 284, 286).

Two **Little Owls** were seen about rocks at St Abbs Head, Berwickshire, on 5th September, and single birds again on the 6th and 8th (HF).

The recent B.T.O. report on the enquiry into the distribution of the **Nightjar** (*Bird Study* 9: 104) unfortunately gives the misleading impression that the bird is absent or very rare in S.W. Scotland, some notes sent to the organiser having gone astray. The bird is in fact still a regular summer visitor to Kirkcudbrightshire, numbers being irregular and probably never large, and in June and July 1962 there were several in song in a much favoured stretch of immature spruce and pine forest, where comparatively open patches of ground alternate with older and denser forest (ADW).

On Islay, where the species does not breed, there were two **Swifts** at Bowmore on 9th July, and four at Gruinart on the 10th, but these were no doubt migrants (CT). On 17th August there was a large passage of hundreds west up Deeside, then a gap when none was seen, followed by prolonged passage with SE winds on the 24th when many birds were involved. The observer suggests that the first lot were perhaps local Scottish birds leaving for the south, and the second lot more northern populations passing south (DJ). At Haddington, East Lothian, the main body of about 150 left at about the usual season, on 21st August, but 20-30 stayed on late, until 4th September, and a straggler until the 15th (AM). There was one at Dalkeith on the 15th, and two were at Penicuik on the 17th (HF), and two at Dunbar on the 30th (AM). Odd birds can of course be expected up to the end of September.

A **Kingfisher** was at Hamilton Low Parks on 22nd September—the observer commenting that it is the first he has seen in four years, and that it is something to know that the bird is not yet extinct in Lanarkshire (DS).

A **Green Woodpecker** was heard at White Loch, Colvend, on 31st August (THB). There does not seem to be any previously published record for Kirkcudbrightshire, but we understand that the species has nested in the county, several nests having been reported since at least 1959. There is a strong likelihood that nesting started as long ago as 1956 or 1957. Fledged young were seen in 1961, and there was a nest near Loch Ken in 1962 (ADW). Also on 31st August a Green Woodpecker was seen and heard at Gartocharn, Dunbartonshire, a further advance north and west, and the first record for the county (TW). A **Great Spotted Woodpecker** was seen, almost as far north as it could be on the mainland of Scotland, in the village of Tongue, Sutherland, on 16th July (JS, PJBS).

On 8th September **Swallows** were moving SW on a broad front, being noted during most of the day over Cramond, and later in the Humbie/Gifford area (TCS). On Islay, where it is a scarce bird, a **House Martin** was seen near Ballygrant on 20th July, and also a pair with a nest at Persibus (ADW). At Bonnyrigg, Midlothian, well-grown young were still being fed in a nest on 28th September (JB).

On 12th August a scattered party of 14 **Ravens**, mostly in pairs, were rising on a thermal over the bar at the mouth of the Endrick; the birds moved away NW over Loch Lomond (TDHM). At Tore, in the Black Isle district of Easter Ross, an occasional **Magpie** has been seen in recent years—always in the same corner of a forestry plantation. In 1955 there were two on 23rd March and one on 15th May; in 1956, two on 26th January; in 1959, one on 20th January; in 1960, one on 29th January; in 1961, one on 24th March and two on 6th April; and in 1962, two on 2nd May. No nests have been found (MKM-D). One was seen at Cockburnspath, Berwickshire, on 18th August—the Magpie being very scarce there also (DGL).

A **Blue Tit** in the Castle Woods, Stornoway, on 20th August is the first recorded there at that time of year, and suggests that the species may possibly establish itself (see *antea* 2: 91) (NL).

At Culnacraig, near Achiltibuie, Wester Ross, there were no fewer than 25 **Ring Ouzels** on 2nd September, evidently the only thrushes on the move there (MS).

In South Harris a pair of **Sedge Warblers** almost certainly had a nest, as the birds were carrying food and indulging in song and other territorial behaviour on 5th August (NL). There was a **Wood Warbler** at Kyles Hill, Berwickshire, on 3rd June. It is not a common bird in the county (DGL).

A nest of young **Spotted Flycatchers** was found in Kirkwall on 8th July. This species breeds only sporadically in Orkney (GAR, MLS). A **Pied Flycatcher** at Kingoodie on 23rd August is the first to be recorded from that part of Tay (HB).

Autumn records of **Tree Pipits** on the Lothian coasts are few, and it is worth noting one at Gullane rubbish dump on 13th September (TCS). Movement of **Meadow Pipits** on a broad front to the SW was noted on 8th September from Barnbougle, West Lothian, to Gifford, between 9.30 a.m. and 5.30 p.m.—more than the usual September daily trickle of birds, and probably the result of the birds being held up by bad weather (TCS).

In the Outer Hebrides, where the **Pied Wagtail** is a scarce breeding bird, a pair was feeding two young at Tarbert harbour, Harris, on 7th August, and another pair was feeding one young bird at Ardhasig, Harris, on 28th/30th August (NL). Some 250 or 300 *alba* Wagtails were flying about and settling on the ground near Durris, Kincardine, at 7.30 p.m. on 9th September. These birds were evidently migrants, grounded by drizzle and low mist, and all that were identified proved to be **White Wagtails**, though many were of course juveniles which could not be identified with certainty. The calls seemed higher pitched and softer than those of the Pied Wagtail (DJ, MJ, NP). **"Yellow" Wagtails** are reported from Skinflats—one on 8th July (GHA); Gladhouse—two on 22nd July (DGA); Quothquhan, Lanarkshire—a cock *flavissima* on 12th August (RE-H); and Carsethorn—a cock on 20th August, and two on the 28th (THB).

A roost of over 500 **Starlings** was found in a cave a few feet above the sea at St Abbs Head, Berwickshire, early in September (HF).

A **Goldfinch** near Stornoway on 20th August is the first to be seen there at that time of year (NL). In Edinburgh, five **Siskins** were feeding in the Royal Botanic Garden on 3rd October (AM). Four or five **Twite** were seen one day during the second half of August on the Merse south of Glencaple, Dumfriesshire (THB).

This is another **Crossbill** year, with the first birds appearing at the end of June. A summary is being prepared by George Waterston, and therefore none of these records is included here.

At least four **Corn Buntings** were noted at Kilchiaran, Rhinns of Islay, on 31st July. This was noted as a very scarce bird on Islay in 1954 (*Scot. Nat.* 1954: 143) (ADW). Three **Lapland Buntings** were flushed from a moor on Kirbister Hill, Birsay, Orkney, on 11th September (PJBS). The arrival and build-up of **Snow Bunting** numbers is exemplified by a series of figures from Aberlady during September—one on the 13th, four on the 16th, two on the 17th, 14 on the 27th, and 55 on the 30th (GHA, JADH, JSO, GLAP, GLS).

In view of the scarcity of **Tree Sparrows** in the areas it is worth recording that over the past few years several pairs have been seen near Killearn, Stirlingshire, and a nest with young was found this year (AJBL), and that on 2nd August two pairs were found near Barrhead, Renfrewshire, with nests in oak and willow trees (RAJ).

Earlier observations—before 1st June 1962

A late **Smew** was at the mouth of the Endrick, Loch Lomond, on 27th May (DS). At Loch Leven, Kinross-shire, there were still 4.500 **Pink-footed Geese** on 28th April (TB, RWJS).

A **Corncrake** was heard on the Dunbartonshire side of the Endrick at Loch Lomond on 20th and 27th May (DS).

At Caerlaverock there were 12 **Black-tailed Godwits** on 12th April (ELR). The distinctive call of the **Spotted Redshank** was heard several times over Dalry, Kirkcudbrightshire, just before midnight on 26th May. The observer knows of no previous inland record for the county (ADW). Sixteen **Purple Sandpipers** at Southerness on 22nd April was a large count for the inner part of the Solway (ELR). Two **Dunlin** at the summit of Windlestraw Law in the Moorfoots on 2nd May were the first the observer had seen in the hills near Walkerburn, but the birds may have been migrants (JB).

Good views were had of a 1st summer **Little Gull** at Loch Moan, Kirkcudbrightshire and Ayrshire, on 26th May (RS, ADW).

A **Barn Owl** was found dead at the side of the road near St Andrews at the end of January (AC).

The **Black Redstart** at Lockerbie on 21st April (*antea* 2: 211) is not in fact the first for Dumfriesshire. One was found near Eliock in March 1947 and the specimen exhibited at a meeting of the Dumfries and Galloway Natural History and Antiquarian Society on 28th March 1947 (*Transactions* 25: 191). We are indebted for these details to ADW, who was at the meet-

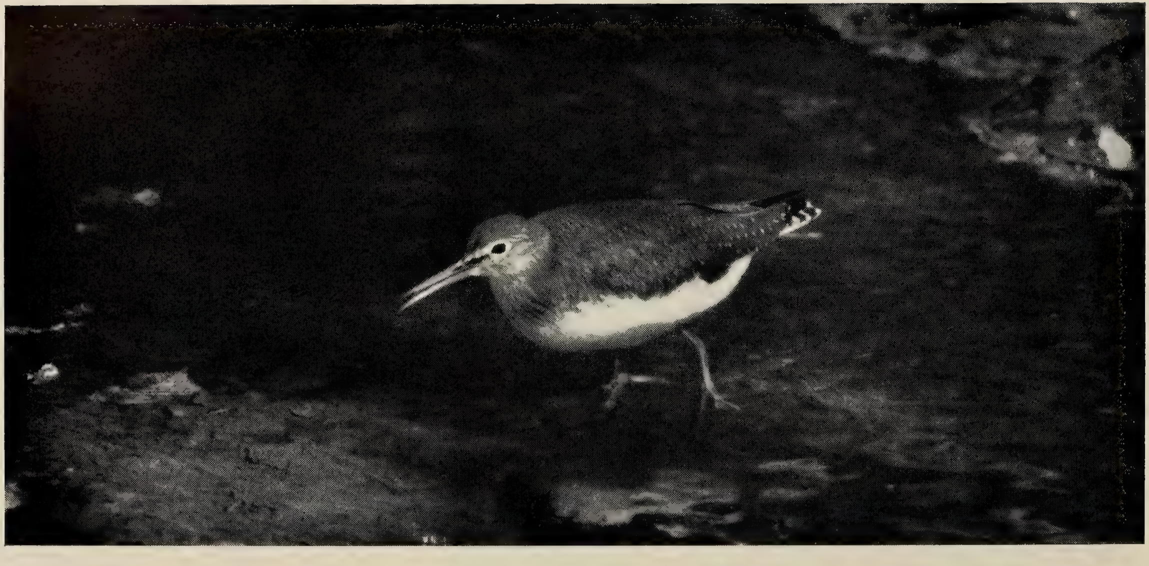

PLATE 13. GREEN SANDPIPER at Bell's Burn, Manderston, Berwickshire—a regular wintering area for the species—on 25th August 1962 (see page 257). *Photograph by S. J. Clarke.*

ing and remembers seeing the bird, which was a cock. It had, he thinks, been caught by a local bird-catcher, but how it came to be dead is not known.

General observations on behaviour, plumage, etc.

A **Fulmar** on Islay on 31st July was brooding in a large nest which was so deep that the bird was not visible from below. The nest may have been built originally by an eagle (ADW). On 25th August a **Gannet** was circling for some time over the south-west end of Loch Shiel at Acharacle. It appeared to be fishing, for it "heeled over" several times as though about to dive, but never actually did so, and finally flew towards the sea at Ardtoe, three miles away (GTJ).

A very pale fawn-coloured **Mallard**, apparently a female, was at Gladhouse on 2nd and 16th September (DGA).

A **Kestrel** at Fettercairn, Kincardineshire, on 19th September was seen clinging to a telegraph pole like a woodpecker, until disturbed by the car (TCS).

Near Pinmore, Ayrshire, on 30th July a **Red Grouse** was seen to fly up from the heather and mob a passing Kestrel (RMR).

After a visit to Galloway during the second half of August THB commented that he had seen more waders in summer plumage than he had recorded in any previous autumn at that time—Bar-tailed Godwit, Knot, Dunlin, Golden Plover and Turnstone were mentioned. In the Forth area AM agreed that he had never seen so many waders in partial or complete summer plumage as he saw this year in July and August, but apart from this we have not been able to find any great support for (or opposition to) the idea. There may be a connection with the late spring or with the poor summer in some areas, but we would welcome further observations and any comments on the subject.

On 3rd September, near Burnmouth, Berwickshire, the speed of a **Whimbrel** was estimated fairly exactly at 35 m.p.h. as it flew beside a car. The wind was negligible, and the bird's flight unhurried (HF). On 25th August a **Bar-tailed Godwit** was feeding with Oystercatchers on the fairways of Southerness Golf Course—a slightly unlikely habitat (THB).

On 28th July three, and later five, **Arctic Skuas** were watched harassing a Swift at Aberlady Bay. This went on for five minutes, and the Swift seemed unable to get away from the skuas, but did more or less what they wanted, until it was knocked to the ground, and dead. One skua was picking at it and two others looking on when the observer reached it. While this behaviour on the part of the skuas may not be so very unusual it is rather strange that a bird with the powers of flight which the Swift possesses should be unable to escape in headlong flight (CT).

Two unusual **Herring Gulls'** nest sites are reported at Ness, near the Butt of Lewis; one pair, accustomed to feed with the domestic poultry, built on the ground beside the hen house and successfully reared young; the other pair built an elaborate structure on the roof of a house which was temporarily empty, using the angle between the roof and the chimney stack, but the eggs disappeared later (WAJC). A pair of **Common Gulls** built a nest 15 feet up a tree beside the River Carron, Easter Ross. The tree overhung the bed of stones at the side of the river, and the nest, a typical construction of grasses and similar material, was in a small fork some distance along one of the branches. Young were hatched and safely brought to the ground. There is said to be a small colony of Common Gulls on the other side of the river nearby (ATM). One of the orange-legged **Kittiwakes** at the Bass Rock on 15th July was seen to have three chicks, and at least one of these had legs of the normal colour. This is what one would expect (GHA, GLAP).

On 13th/15th August, when there was a marked movement of terns into the upper Forth, large numbers collected at Moor Loch, Tulliallan, Fife. **Common** or **Arctic Terns**—never more than two or three at a time—were several times seen to perch on the upper branches of a tree on one of the islands (GD, JP).

On 7th September a **Jackdaw** was seen at St Abbs with white spots on the body, and whitish wings—the one more so than the other (HF), and on 14th August there was one at Barns Ness with a deformed beak—the upper mandible being elongated and hooked down over the tip of the lower one (DGL).

REVIEWS

BIRDS OF NORTH AND EAST PERTHSHIRE. By Henry Boase. 1961. Typescript. Pp. i + 239; 3 maps and 5 graphs.

This modest account describes in detail a life's study of the birds of Perthshire, roughly north of Strathearn. The manuscript is typed, and three copies are available for reference, one in the library of the Edward Grey Institute of Field Ornithology at Oxford University, another in the Reference Department of the Dundee Central Library, and the third in the library at the Scottish Centre for Ornithology, 21 Regent Terrace, Edinburgh. The period covered is the 50 years prior to September 1961, and the documentation extends to 233 pages of quarto text plus a bibliography of over 60 books and papers, an introduction and a useful species index. The observations refer mostly to weekend excursions, chiefly over the lower ground, and there are few blank periods except for the early 1930's. The record is a personal account and not intended for publication, but is nonetheless valuable for reference.

The area under discussion is described in detail, first by lochs and drainage areas, and secondly by other ecological characteristics. This description runs to about five pages, followed by six pages giving an account of the general distribution of birds according to ecological features. The next 22 pages list the birds seen at the different lochs; and the greater part of the text, 167 pages, gives a detailed account of the occurrence of each of about 240 bird species. There are five pages giving an account of migration through the area, and eight illustrations. Two of these show the principal flight-lines of birds through the area, and there are five graphs of counts of Mallard, Tufted Duck and Shelduck, and a map of the rookeries in the drainage basin of the River Tay.

This is an ambitious document. It is a very considerable undertaking for one man to record the birds of the greater part of a Highland county where large areas are sparsely inhabited and visited comparatively seldom by ornithologists. To some extent the scope of the work must depend on the range of the author's movements, and the activity of his correspondents. Mr Boase states that the moorland areas were visited less thoroughly than the low ground; and hence the reader may conclude that he should not attach equal weight to all the observations. Perhaps some apparent scarcities of inland birds may be due as much to lack of observation as to lack of birds. For instance, in birch woodland in Glen Esk in Angus, Redpolls are common, flocking together in scores or hundreds in autumn, and it is interesting that they should be found rather scarce in Perthshire. Similarly Bullfinches are frequently encountered in Angus and Aberdeenshire, but Mr Boase has few records for N. and E. Perth. Reed Buntings are commonly seen in stubble at the moor edge in Angus and Lower Deeside, but are apparently casual in Perthshire. Likewise Snow Buntings are regular winter visitors to the Angus glens, and one wonders whether they may be more frequent in N. Perth than the author recorded. Ring Ouzels seem remarkably scarce in the hills in this area. Only seven records of Short-eared Owls over such a long period seems extraordinary, and the reviewer has seen this number in N. Perth in one morning. Similarly Hen Harriers are more widespread in the hills, especially in winter, than Mr Boase has recorded. The account is a personal one, and possibly single observations are given undue prominence; the casual reader should not conclude from occasional records that Ptarmigan, for example, are occasional in Perthshire when really they are widespread in suitable habitats every year but rarely seen because of difficulties of access.

Such comments, however, illustrate the lack of published information on regional bird distribution in this (or any) part of Scotland; and Mr Boase has provided a pioneer study on which others can build. Here is an up-to-date account of all the relevant literature published, showing us the gaps where more observations are needed. In summary, 241 species of birds have been recorded in N. and E. Perthshire. Twenty-seven species have not been seen since 1900, but these are compensated for by 31 others seen for the first time since then. Eight species are apparently decreasing, but fifteen are increasing. Ten species have bred for the first time since 1900, and only four species, Red-throated Diver, Kite, Osprey, and Red-necked Phalarope have ceased to breed.

This is a very bald summary of a great deal of information. No student of waterfowl in Scotland should overlook Mr Boase's contribution. It is a mine of information for visitors to the area; and we now have a yardstick for documenting changes in the status of various species. Mr Boase is clearly a careful observer and a painstaking recorder of his observations; and the detail given in many cases, particularly with regard to water birds, stands as a model for reference. He writes precisely and in a pleasant style that makes easy reading, and it will be a pity if this account cannot find a wider circulation. There is a great need for studies of this sort to be deposited at centres where they are easily accessible; and it is to be hoped that this detailed account will be the forerunner of others. The Scottish Centre for Ornithology will fill a valuable function if used as a depot for faunal lists that may not be suitable for formal publication. All too little information is available about local distribution of birds in Scotland, and Mr Boase is to be congratulated on his enterprise and industry; and Scottish ornithology would greatly profit if we all copied his example.

David Jenkins.

Identification for Ringers No. 2: The genus Phylloscopus. By Kenneth Williamson. Oxford, British Trust for Ornithology, 1962. Pp. 86; 5 plates (one in colour) and line drawing. Paper cover 7/-, boards 10/6 (post paid).

In the second of his identification-guides Kenneth Williamson has tackled the leaf-warblers, one of the most difficult of the passerine genera for both the field observer and the taxonomist. As a skilled practitioner in both departments of ornithology he has met all the problems with equal zest, and the result is a pocket masterpiece of concision and clarity. This is far more than just a condensation of Ticehurst's classic monograph of *Phylloscopus*; it is in fact an important revision of the genus, as well as a ready aid to identification.

Only ten of the thirty species discussed are on the British list, but half of the remainder are potential candidates, and no ambitious bird-watcher can afford to be without this book. Even those seasoned characters who can hardly bring themselves to look at a Yellow-browed Warbler nowadays, may take a new lease of life when they learn that it could well be a Two-barred Greenish or even a Blyth's Crowned Leaf-warbler instead. And when you know that a Greenish Warbler does not always have a wing-bar, nor a Bonelli's a yellow rump, no humble "Willie" is unworthy of attention.

The layout of the work is essentially the same as that of the first guide in this series. For each species there are sections on general appearance and field-characters (including voice); age-characters; colour of soft parts (*i.e.* hard parts); measurements; weight; wing-formula; moult; and a detailed summary of the distribution (including recent changes where these are documented). At the end are the tables of measurements, with their means and theoretical ranges. As before, there are four excellent monochrome illustrations; and there is also a figure showing the distribution of white on the tail-feathers of some eastern species.

Several distinct advances on the first guide are to be commended, notably the succinct essays on taxonomics which precede the individual treatment of the more complex species and species-groups, and which go far to elucidate their relationships; and a new key to the bird in the hand, more complicated but probably less fallible than Ticehurst's. This time, the author has consulted specimens from museums overseas as well as in our national collections; and as a result the treatment is more complete and the systematic review has greater authority. The samples used in the tables are generally much larger, and the ranges consequently more reliable. (It is interesting to note that the ranges given for the two sexes of the Willow Warbler are almost exactly the same as those computed by the late Guy Brownlow from the Fair Isle data, which made nonsense of the figures quoted in the *Handbook*). Another welcome innovation is the splendid colour-plate of six species, by D. I. M. Wallace.

Robert Gillmor's design for the cover is uniform with that of Guide No. 1 except that the beard-coloured panels are now an appropriate spring green, and the pen-drawing features a rather portly Willow Warbler on a spray of cherry-blossom. The production has been excellently done, and I have noticed only one misprint (a date on p. 38). This is altogether good value for the money.

P. E. DAVIS.

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

REPORT OF COUNCIL

The Council has the honour to submit the following Report for the past year:

Membership. At the end of the session the total paid-up membership of the Club had reached the figure of 1,103. During the session, 221 new members were enrolled while 154 resigned or failed to renew their subscriptions. Joint membership subscriptions rose from 30 to 60. Comparative figures are shown in the following tables:

	31/8/58	31/8/59	31/8/60	31/8/61	31/8/62
Ordinary	738	747	781	852	918
Junior	148	140	141	177	181
Honorary	11	7	5	6	4
	897	894	927	1035	1103

Deeds of Covenant. Deeds of Covenant signed by members for their subscriptions increased from 74 to 130 during the session. The Council wishes to thank members who signed new Covenants and thereby enabled the general funds of the Club to benefit by a total of £112, and to commend this method of subscribing to all members who pay Income Tax at the full rate.

Council Meetings. Five meetings of Council were held during the session.

General Meetings. A full programme of lectures was carried out during the winter in six Branches. The Council wishes to thank all the lecturers who gave so freely of their services and also the Branch Officials for arrangements and hospitality.

Ayr Branch. A new Branch of the Club, under the Chairmanship of R. Macalpine Ramage, was formed in Ayr at a special meeting held in the Loudon Hall on 25th April at the request of local members. A number of new members have been enrolled as a result, and the Council expresses its good wishes for the future success of the Branch.

Dumfries Branch. The first session of the new Dumfries Branch was completed very successfully with an encouraging attendance at the winter meetings. During the year the Branch has more than doubled its original membership.

Excursions. In addition to the summer excursions arranged by the Branches, the Club also organised weekend excursions to Dumfries in February and to Aviemore in May, both of which were well attended.

Conference. The Annual Conference and Annual Dinner were held in Dunblane when over 200 members and guests attended.

"Scottish Birds." During the session the Council accepted with great regret the resignation of Professor M. F. M. Meiklejohn as Editor of the journal, a position he has held for three years since the beginning of the first volume. The Council wishes to pay tribute to the great work he has done in establishing the journal and promoting its present high standard, and to thank him for giving so much of his time and energy to this.

With the beginning of a new volume, the Council appointed A. T. Macmillan as Editor, with the assistance of D. G. Andrew and Dr T. C. Smout, and wishes to congratulate him on keeping up the high standard set by his predecessor. The volume of work entailed in producing a journal of the standard of "Scottish Birds" is very considerable and the Council expresses its deep gratitude to all the Editors for the service they have given to the Club on an entirely voluntary basis.

Four numbers of the journal and a special supplement, "A Check List of the Birds of Tentsmuir, Fife," were published during the year, together with an Index to Volume 1.

Scottish Bird Records Committee. The Committee met once during the session under the Chairmanship of Dr J. W. Campbell; the Review for 1961 is published in "Scottish Birds." The Council regrets to announce the resignation of Dr Campbell as Convenor of the Committee and wishes to record its sincere thanks to him for his work on the Reviews. The Council has appointed D. G. Andrew to serve in his place.

Club Library. A number of books and journals have been presented to the Library during the year and the Council records its sincere thanks to all the donors. The Library Committee met during the year to prepare recommendations for future policy and development of the library. Profits from the sales of new books through the Book Agency, which are credited to the Library Fund, have enabled the purchase of both new and scarce reference books. Important purchases during the session include both the Old (1791) and the New (1845) Statistical Accounts of Scotland. The Council urges members to obtain their books through the Club Book Agency in order that the Library Fund may be built up and more essential reference books may be purchased for the Reference Library.

Scottish Centre for Ornithology and Bird Protection. During the session the Centre has been widely used by members, visitors from all parts of Britain, and also by visitors from Australia, America, Canada, Brazil, Belgium and Malta. A great deal of information has been given on bird-watching facilities in Scotland, both to visitors and by correspondence. On 27th July members of Council and of the Edinburgh Branch Committee again entertained a group of 16 American ornithologists who were visiting Scotland on the second "Birds of Europe" tour under the leadership of Orville Crowder. Informal meetings and discussions have been held in the Centre during the winter.

At its meeting in April 1962, the Council considered recommendations made by the Library Committee that additional office and library accommodation should be made available at the Centre, and that there was a need for further secretarial assistance to meet the increased work involved in running the Club and in developing the Library. As a first step the Council at that time agreed that the basement electricity should be rewired, and the House Fabric Fund Accounts for this year reflect this expenditure. In furtherance of this policy the Council has also decided to utilise part of the surplus for this year by making the provisions shown in the Revenue Account against these future costs. The Council feels that these provisions, together with the allocations from next year's budget, will enable the Club to continue its development in these two important spheres.

For the Council, M. F. M. MEIKLEJOHN, President.

TWENTY-SIXTH ANNUAL GENERAL MEETING

The twenty-sixth Annual General Meeting of the Club was held in the Dunblane Hotel Hydro, Perthshire, on Saturday 27th October 1962, at 6.15 p.m. Professor M. F. M. Meiklejohn, President of the Club, presided over an attendance of about one hundred members.

Apologies. Apologies for absence were received from A. G. S. Bryson, Dr J. W. Campbell, R. M. Ramage, Rev. J. M. McWilliam, A. D. Watson and Professor V. C. Wynne-Edwards.

Minutes. The Minutes of the twenty-fifth Annual General Meeting held in Dunblane on 28th October 1961, were approved and signed.

Report of Council. In presenting the Report of Council for the past session (see preceding page) the Chairman announced with great regret the resignation of Arthur Smith as Business Editor of "Scottish Birds" and thanked him most warmly for the work he had done. He emphasised that without Mr Smith's assistance in establishing and maintaining relations with the printer the publication of the journal could not have been carried out.

The Chairman reported that he had recently presented to the Club the collection of birds' eggs made by his father. which he hoped would be a useful addition to the Scottish Centre for reference purposes. He also reported that the Council had made recommendations to the British Ornithologists' Union that the International Ornithological Congress, due to be held in Britain in 1966, should take place in Edinburgh and an invitation had been extended on behalf of the Club to the Congress Committee.

Accounts. The Accounts for the past session, which had been previously circulated, were considered and approved.

Election of Auditor. Arthur Walker, C.A., was re-elected Auditor for the ensuing session.

Amendments to Constitution. Four amendments to the Constitution of the Club, previously circulated in "Scotish Birds" (2: 221), were approved.

Election of new Members of Council. The meeting approved the election of G. H. Acklam and Dr G. M. Dunnet, recommended by the Council to replace K. S. Macgregor and Professor V. C. Wynne-Edwards who retired from the Council by rotation, and a sincere vote of thanks was given to the retiring members for their services to the Club.

Votes of thanks. The Chairman moved a warm vote of thanks to all the members who were contributing so much to the success of the Conference in the Registration Office, the projectionists, the leaders of excursions, and to Alasdair Anderson for lending his pictures and sketch books for exhibition. The meeting closed with a hearty vote of thanks to the Chairman on the motion of Lt. Col. J. P. Grant, Member of Council of the Club.

THE SCOTTISH ORNITHOLOGISTS' CLUB

Revenue Account for the year ended 31st August 1962

	Year to 31/8/62	Year to 31/8/61
INCOME—		
Subscriptions received for year	£1185 8 6	£1112
Income Tax recovered on covenanted subscriptions	111 17 3	62
Income from Endowments	91 2 6	77
Income from Accumulated Surplus	39 11 4	37
Sales of Club badges and field lists	11 16 8	8
Sales of Birds of Aberlady Bay Report ..., ..	11 15 0	51
	£1451 11 3	1347

EXPENDITURE—

Hire of lecture halls and equipment		£83 7 9	74
Lecturers' expenses		51 12 2	68
Secretarial services		435 12 3	394
Postages, telephone, printing and stationery ...		204 4 0	168
Scottish Centre for Ornithology and Bird Protection:			
Furniture and equipment and repairs attributable to Club		17 14 0	89
Annual contribution to House Fabric Fund ...		50 0 0	50
Heating and lighting, insurance and cleaning attributable to Club		67 13 5	66
Allocation for production and distribution of Scottish Birds (see Account for details)		300 0 0	195
Subscriptions to Council for Nature, B.T.O., R.S.P.B. and I.C.P.B.		5 2 0	5
Net cost of Conference		9 9 10	36
Contribution to Library Fund (see Account for details)		25 0 0	10
Purchase of Club badges and field lists		43 0 4	—
Sundry administration expenses		21 10 2	37
		£1314 5 11	1192
Provisions made by Council towards:			
Additional secretarial assistance	£50 0 0		
Furnishing and equipping basement at Centre	50 0 0		
Expenses of "Check List of Birds of Scotland"	20 0 0		
		120 0 0	—
		£1434 5 11	1192
Balance carried to Balance Sheet		17 5 4	155
		£1451 11 3	1347

"Scottish Birds" Account for the year ended 31st August 1962

		Year to 31/8/62	Year to 31/8/61
Printing and distribution of Vol. 1 Nos. 13 and 14; Index to Vol. 1, and Vol. 2 Nos. 1 and 2:			
Printing		£347 19 3	
Blocks		29 6 0	
Postages		77 2 2	
Sundry expenses		7 11 10	
		461 19 3	398
Less—Advertisement receipts ...	£108 9 4		
Sales to non-members	84 7 9		
		192 17 1	203
		269 2 2	195
Balance carried forward		30 17 10	—
Amount allotted by Council		£300 0 0	195

Note: The cost of the "Birds of Tentsmuir" supplement was met by a grant from the Baxter Trust (£91. 9. 5).

Library Fund Account for the year ended 31st August 1962

	Year to 31/8/62	Year to 31/8/61
Balance brought forward from previous year	£31 1 7	34
Add—Donations received	0 0 0	3
Sale of duplicate copies	12 18 3	4
Contribution from Revenue Account	25 0 0	10
Commission on Book Agency	56 9 10	20
	125 9 8	71
Less—Books and journals purchased	111 7 3	40
Balance carried forward	£14 2 5	31

Balance Sheet as at 31st August 1962

	As at 31/8/62	As at 31/8/61
Accumulated Surplus :		
At 31st August 1961	£1002 19 10	848
Add : Balance for year from Revenue Account	17 5 4	155
Library Fund :	1020 5 2	1003
Balance per Account	14 2 5	31
Scottish Birds :		
Balance per Account	30 17 10	—
Provisions :		
As detailed in Revenue Account	120 0 0	—
	1185 5 5	1034
Endowments—the free annual income of which is available for the advancement of ornithology:		
Miss L. J. Rintoul	1000 0 0	1000
Dr E. V. Baxter	1000 0 0	1000
	£3185 5 5	3034
Cash :		
In hands of Secretary	£10 0 0	—
In Royal Bank of Scotland Current Account	101 14 10	55
In Edinburgh Savings Bank	127 17 1	480
	239 11 11	535
5% Defence Bonds	500 0 0	500
Loan to Renfrew County Council	500 0 0	—
Debts due to Club	9 10 0	24
	1249 1 11	1059
Less : Subscriptions paid in advance	63 16 6	25
Endowment Investments :	1185 5 5	1034
£1151 3½% War Stock at cost	1000 0 0	1000
976 units The Equities Investment Fund for Charities at cost	1000 0 0	1000
	£3185 5 5	3034

House Fabric Fund — Summary of Accounts for year to 31st August 1962

		Year to 31/8/62	Year to 31/8/61
RECEIPTS—			
Balance as at 31st August 1961		£71 19 7	£172 11 8
Rent from Royal Society for the Protection of Birds at £100 per annum for year to 11th November 1962		100 0 0	100 0 0
Rent from Mr and Mrs Waterston at £100 per annum for year to 11th November 1962		100 0 0	100 0 0
Annual Contribution from S.O.C. Revenue Account		50 0 0	50 0 0
Miscellaneous Interests		2 12 2	4 2 11
		£324 11 9	£426 14 7
EXPENDITURE—			
Repairs and maintenance (including cost of rewiring basement—£67)		£92 12 5	£252 7 0
Property Burdens		135 7 9	100 5 3
Insurance		10 4 11	2 2 9
		£238 5 1	£354 15 0
On deposit with Edinburgh Mutual & Dunedin Building Society ...	£81 15 1		
At credit of Account with Messrs Fraser, Stodart & Ballingall, W.S.	4 11 7		
		86 6 8	71 19 7
		£324 11 9	£426 14 7

EDINBURGH, 10th October, 1962.—I have audited the foregoing revenue accounts for the year to 31st August 1962 and the Balance Sheet as at that date. I have accepted as correct the subscriptions shown as received in the Books and certify that in my opinion the foregoing accounts are correctly stated and sufficiently vouched.

(Signed) ARTHUR WALKER,
Chartered Accountants.

COUNCIL AND OFFICE-BEARERS OF THE CLUB FOR SESSION 26

Hon. Presidents : Dr D. A. Bannerman, O.B.E.; Sir Charles G. Connell; Rev. J. M. McWilliam

President : Professor M. F. M. Meiklejohn.

Vice-President : Dr I. D. Pennie.

Hon. Treasurer : Robert Hillcoat, C.A.

Hon. Treasurer of House Fabric Fund : D. G. Andrew.

Secretary and Treasurer : Mrs George Waterston.

Editor of "Scottish Birds" : A. T. Macmillan.

Assistant Editors of "Scottish Birds": D. G. Andrew, Dr T. C. Smout.

Business Editor of "Scottish Birds": Dr T. C. Smout.

Council : G. H. Acklam; A. G. S. Bryson; Dr J. W. Campbell; Dr G. M. Dunnet; Dr W. J Eggeling; Lt. Col. J. P. Grant; Alastair Macdonald; George Waterston; A. D. Watson.

Branch Representatives to Council : William Austin (Dumfries); Miss M. H. E. Cuninghame (St Andrews); Miss E. A. Garden (Aberdeen); C. E. Palmar (Glasgow); R. M. Ramage (Ayr); J. Hunter Sutherland (Dundee); Miss Olive Thompson (Edinburgh).

BRANCH OFFICE-BEARERS

Aberdeen : Chairman, Professor V. C. Wynne-Edwards; Vice-Chairman, Alex. Anderson; Secretary, Miss E. A. Garden; Committee, Dr G. M. Dunnet, Miss F. J. Greig.

Ayr : Chairman, R. M. Ramage; Vice-Chairman, G. A. Richards; Secretary, to be appointed; Committee, Dr M. E. Castle, Mrs A. E. S. Scorgie.

Dumfries : Chairman, Sir Arthur Duncan; Vice-Chairman, William Austin; Secretary, H. M. Russell; Committee, E. L. Roberts, R. T. Smith, A. D. Watson.

Dundee : Chairman, F. D. Graham; Vice-Chairman, J. Hunter Sutherland; Secretary, Jack Scobie; Committee, J. E. Forrest, A. H. Shepherd.

Edinburgh : Chairman, D. G. Andrew; Vice-Chairman, A. T. Macmillan; Secretary, Miss Olive Thompson; Committee, C. N. L. Cowper, Mrs E. F. Paterson, M. J. H. Robson, R. W. J. Smith.

Glasgow : Chairman, C. E. Palmar; Vice-Chairman, G. H. Acklam; Secretary, G. L. A. Patrick; Committee, J. M. S. Arnott, Miss K. Calver, J. Eunson, Miss W. U. Flower.

St Andrews : Chairman, Miss J. McFarlane; Vice-Chairman, Miss Doris Wilson; Secretary, Miss M. M. Spires; Committee, Miss M. H. E. Cuninghame, Miss J. V. Black, Julian Holdroyd, F. C. Stead.

SCOTTISH BIRD RECORDS COMMITTEE

Chairman : D. G. Andrew.

Committee : A. G. S. Bryson, Dr J. W. Campbell, Sir Arthur Duncan, Dr W. J. Eggeling, A. T. Macmillan, Professor M. F. M. Meiklejohn, Dr I. D. Pennie, Kenneth Williamson, George Waterston, Professor V. C. Wynne-Edwards.

WEEKEND EXCURSION TO DUMFRIES

Arrangements have again been made this year with the County Hotel, Dumfries, for a weekend excursion to the Solway to see the geese.

Accommodation has been arranged for the weekend 15th to 17th February 1963, at inclusive terms of £4, 5s per person as follows—bed on Friday night 15th; breakfast, packed lunch, dinner and bed on Saturday 16th; breakfast and packed lunch on Sunday 17th.

Members wishing to come on this excursion should book direct with the Manager, The County Hotel, Dumfries (Tel. 146), mentioning that they are members of the Club; they may also bring guests. Arrangements for transport by private cars to Dumfries should be made with Branch Secretaries. It is advisable to bring warm clothing and thermos flasks, and if possible, gum boots.

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LIBRARY. Large section of books and periodicals housed at Ealing Central Library.

READING CIRCLES of natural history journals for a small subscription.

UNIVERSITY LECTURES. University of London, Department of Extra-Mural Studies have courses to advance certain aspects of Natural History.

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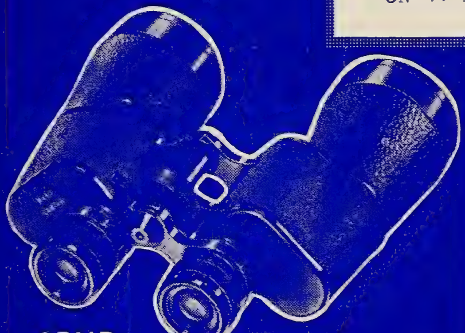

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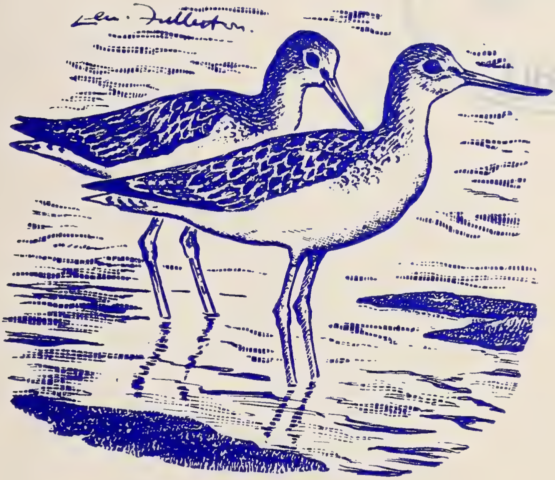
SCOTTISH BIRDS



The Journal of The Scottish Ornithologists' Club

Vol. 2 No. 5 *Spring 1963*

FIVE SHILLINGS

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Dumfries, Dundee, Edinburgh, Glasgow and St Andrews, at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish Ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited, and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. Joint membership is available to married couples at an annual subscription of 40/-. "Scottish Birds" is issued free to members but Joint members will receive only one copy between them.

The affairs of the Club are controlled by a Council composed of the Hon. Presidents, the President, the Vice-President, the Hon. Treasurer, the Editor and Business Editor of "Scottish Birds", the Hon. Treasurer of the House Fabric Fund, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

An official tie with small white Crested Tits embroidered on it can be obtained in dark green or in navy blue by Members only from Messrs R. W. Forsyth Ltd., Princes Street, Edinburgh, or 5 Renfield Street, Glasgow, C.2 at a cost of 16s 9d post extra. A small brooch in silver and blue can be obtained for the use of Members of the Club. Price 2s 6d each from the Secretary, or from Hon. Branch Secretaries.

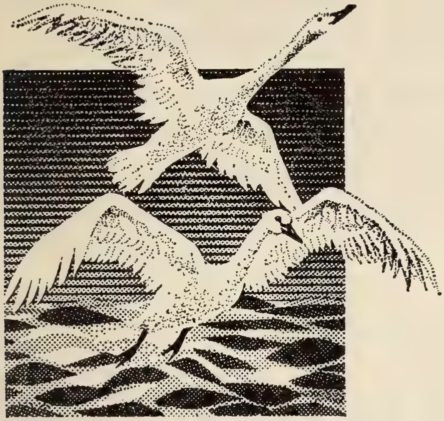
Forms of application for Membership, copy of the Club Constitution, and other literature is obtainable from the Club Secretary, Mrs George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7. (Tel. Waverley 6042).

CLUB-ROOM AND LIBRARY

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to Members during office hours, and on Wednesday evenings from 7 to 10 p.m. during the winter months. Members may use the Reference Library and borrow books from the Duplicate Section. Facilities for making tea or coffee are available at a nominal charge and Members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen can be used for the informal showing ol slides at a charge of 2s 6d per night to cover the replacement of bulbs.

EDITORIAL ADDRESS

All contributions to A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Advertisements to T. C. Smout, 93 Warrender Park Road, Edinburgh 9.



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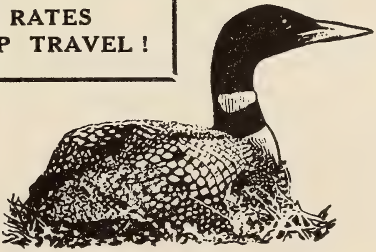

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SCOTTISH BIRDS

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Editorial

WITH every issue of *Scottish Birds* more people send us their notes. The list of those whose observations have been used in Current Notes gives some idea of the number of contributors, which has now reached the magic figure of 100 for the first time. We have recently commented on some of the problems created by sight records of rare birds (*antea* 2: 226). In the December 1962 number of *British Birds* (55: 557), under the title of "Sight records of unusual birds," the editors give a very useful summary of present thinking on this subject. With more and more people sending in records, and fewer and fewer of these being published in detail, many observers are ignorant of the form in which such records should be submitted, and of the supporting details needed. While it may perhaps be said that the need to produce convincing descriptions of any unusual birds one sees can detract from the careless joys of bird-watching, it is only right to insist on a high degree of certainty before such observations are published. The statement in *British Birds* represents current standards and practice, and we earnestly commend it to anyone submitting records of unusual birds to *Scottish Birds* or to any other serious ornithological journal.

Reviews. With quite a rash of books reviewed in this issue, it is fitting to say an overdue word of thanks to our reviewers. Hounded by the editors, they write without material reward, deprived of even their traditional perquisite of retaining the books they review; for, to the great benefit of Scottish ornithology, they most generously donate their review copies to the S.O.C. Library.

"The Whooper Swan in Great Britain." In *Bird Study* for December 1962 (9: 217) H. Boyd and S. K. Eltringham record over 3,100 Whooper Swans in Scotland, England and Wales in November 1961, and put the total population at probably under 4,000. Their paper will be of special interest to readers, since more than 80% of these birds were in Scotland.

ISLE OF MAY BIRD OBSERVATORY AND FIELD STATION REPORT FOR 1962

PREPARED FOR THE OBSERVATORY COMMITTEE

by NANCY J. GORDON, *Hon. Secretary*

During 1962 the Observatory was manned for 173 days between 22nd March and 8th November. The number of observer nights was 671.

Both migration seasons were well covered except for the middle of April, and two small gaps in October. Two special visits during the breeding season resulted in the ringing of a large number of nestling seabirds, especially Shags. Observers, especially ringers, are needed to fill the gaps which nearly always occur in late October-November, April and the breeding season.

The spring migration was unspectacular but there were several very heavy falls of birds in autumn, when more birds were ringed than in the whole of 1961.

The highlight of 1962 was the arrival on 8th October of a Radde's Bush Warbler *Phylloscopus schwarzii,* a new record for Scotland. Another "first" for the May was a Tawny Pipit* *Anthus campestris* trapped on 24th October. The island's fifth Rustic Bunting* was caught on 11th September.

A pair of Greater Black-backed Gulls bred for the first time, and their two young were ringed in August. Several pairs of Puffins reared young in the Colm's Hole burrows, the first proof of breeding away from the West Cliffs.

MIGRATION

Spring

The Observatory opened on 22nd March, and the spring migration was covered until 4th June except for gaps at 26th-27th March and 13th-20th April. Very cold weather persisted into early April, delaying the usual spring migrants, especially Wheatears, the first of which did not arrive until 7th April. After this there were considerable periods of fine weather in anticyclonic conditions, and no large fall of migrants occurred.

March-April. There was little movement until 24th March when poor visiblity with rain brought in about 30 Blackbirds, 20 Redwings and 16 Song Thrushes. Smaller flocks of these species continued to arrive in variable weather conditions until the end of the month, with small numbers of Chaffinches,

*subject to official confirmation

Robins, Greenfinches, Skylarks and Pied Wagtails. A Black Redstart was seen on 5th April and the first Linnets on the 6th when there was some Meadow Pipit movement also. Strong east winds on the 8th led to the overnight arrival of over 40 Blackbirds and a few Redwings. A period of westerly winds followed, with movements of Meadow Pipits only. Observers reaching the island on 21st April, after south-east winds and fog, reported a considerable fall of birds, including Robins (c. 100), Dunnocks (30), Bramblings (20), Chaffinches (7), Wheatears (20), Blackbirds (8) and Ring Ouzels (3), with single Redstart, Black Redstart and Goldcrest. Until the wind veered to south-west on 25th April this movement continued, and included the arrivals of a Goldfinch and a Cuckoo on the 22nd, an early Wryneck and the first 2 Chiffchaffs on the 23rd, and a Tree Pipit and Willow Warbler on the 25th. At the end of the month the weather was fine and warm; despite easterly winds, there was no visible migration.

May. The next arrivals, mainly of warblers, came with a period of fog on 5th May and included 30 Willow Warblers, 10 Whitethroats, 20 Wheatears, 7 Sedge Warblers and 4 White Wagtails, as well as a few Redstarts, Blackbirds, Whinchats and the first Sand Martins. Similar movement continued for the next three days, with 6 Redpolls arriving on the 6th. Another influx of warblers occurred on 11th May and the following day saw the arrival of 2 Redstarts and a Nightingale (which stayed until the 14th). A few Greenland Wheatears came in with westerly gales and rain on 16th-17th, after which warbler movement resumed in modest amount until the 22nd, with a late Black Redstart on the 18th. A female Bluethroat was seen on the 25th.

A more unusual fall, but not of birds, occurred on 26th May, when most of the 150 passengers of the National Trust for Scotland's Island Cruise landed from the M.S. *Meteor,* on a day when there were no migrant birds on the island.

The south-west winds backed to east with rain and fog on 27th-29th May, bringing more warblers, a few Spotted Flycatchers and on the 29th another Bluethroat. West winds returned on the 30th, but on 1st June a female Red-breasted Flycatcher arrived, only the second spring occurrence of this species. After a small influx of warblers on 4th June there was no further significant migration.

Summer

Observers on the island in July recorded evidence of the widespread Crossbill irruption; up to 11 birds were present between 12th and 16th and five of these were ringed. Some waders (including 8 Whimbrel and 70 Purple Sandpipers), a Cuckoo, a Sedge Warbler and a Willow Warbler were recorded during the same period.

Autumn

The Observatory was manned between 28th July and 8th November with gaps at 7th-14th August, 10th-11th October and 17th-19th October. Nearly 2,000 birds were ringed between 28th July and 8th November.

August. Weather on the whole was wet and stormy, with strong west winds. The main feature of the month was the build-up of the wader migration, heralded by 2 Green Sandpipers and 2 Whimbrel on the 3rd. Easterly winds on 14th-15th brought falls of birds throughout 15th, 16th and 17th August, with peaks of 20 Pied Flycatchers, 20 Willow Warblers and 7 Garden Warblers, together with a few Whitethroats, Redstarts, Tree Pipits and Whinchats daily, a single Reed Warbler on 15th and 5 Crossbills on the 16th. Warblers continued to arrive in small numbers until the end of the month, with the winds mainly westerly. A Barred Warbler was trapped on the 18th, Wheatear numbers increased to 40 a day, and there were arrivals of Pied Flycatchers on the 20th and 31st, with a few *alba* wagtails. "Comic" tern passage reached 80 a day by the 31st; the highest number of Sandwich Terns was seven. The daily passage of Swallows did not exceed thirteen.

The main arrival of waders began on the 17th, just before the wind returned to the east, and this movement continued until the 21st, with maxima of 35 Redshanks, 105 Purple Sandpipers, 112 Curlews, 320 Turnstones, 8 Knots, 2 Whimbrel, a Green Sandpiper, a Common Sandpiper and a Dunlin. A Spotted Redshank was identified on the 19th, 2 Little Stints on the 21st, a Ringed Plover on the 24th, a Greenshank on the 26th and 6 Golden Plover on the 29th. Knots were arriving on the last three days of the month (70 on the 30th); 9 Dunlin were seen on the 30th and 4 Ruffs on the 31st.

Manx Shearwaters were noted from the 21st onward, with 49 on the 30th. Single Arctic and Great Skuas were seen at this time, and a Red-throated Diver on the 31st.

September. Rain, east winds and fog from the 3rd to 6th brought Willow Warblers, Sedge Warblers, Redstarts, Whitethroats, Pied and Spotted Flycatchers, Wheatears and *alba* wagtails, as well as a few Golden Plovers and single Greenshank and Spotted Redshank. Sea-watchers recorded 250 Manx Shearwaters on the 3rd, 11 Sooty Shearwaters on the 5th, and a Great Skua on the 6th. On the 9th the wind backed to SE force 7, with rain, bringing small numbers of warblers and, next day, a large movement of Meadow Pipits. Another wave of birds arrived with a small depression passing on the 11th; over 77 Wheatears, 5 Whinchats, 12 Whitethroats, 12 Pied Flycatchers, 20 Willow Warblers, 4 Garden Warblers, a

Barred Warbler and a Rustic Bunting were recorded, as well as a Green Sandpiper and a Ruff. Numbers dwindled gradually thereafter, with west winds and few new arrivals after the 12th. Meadow Pipit passage reached a peak of 500 on the 13th, and there was some hirundine movement during this time with Swallows reaching 200 and House Martins 250 on the 16th. A Little Gull was seen on the 11th.

Despite north-east winds from 18th-20th September there were only small arrivals of warblers, but the first Fieldfare was seen on the 20th, and also an Ortolan Bunting and 2 Lapland Buntings. The first Redwings (20) came in on the 25th with Wheatears, *alba* wagtails and a few warblers. Heavier arrivals of these species on 26th-27th brought also Siskins, Chaffinches, Goldcrests, Redstarts and a Great Spotted Woodpecker. The first Brambling was seen on the 29th.

October. The first few days were warm and sunny, with west winds and consequently little visible migration—only coastal movement of Meadow Pipits, Swallows, Skylarks and Linnets. The first Snow Bunting of the autumn arrived on the 3rd, and the 4th saw the arrival of 300 Redwings with a few Fieldfares and Bramblings and an offshore passage of terns. On this date 1,000 Greater Black-backed Gulls were recorded, and the last Lesser Black-backed Gull was seen. On the 7th the winds became easterly with fog, heralding the build-up of a large anticyclone over north Germany; 100 Redwings, 40 Fieldfares, a Red-backed Shrike and a Crossbill came in. The migrants on the 8th had probably travelled down-wind from the Continent as they included a Yellow-browed Warbler, 2 Blackcaps, a Spotted Flycatcher, a Whitethroat and the first record for Scotland of a Radde's Bush Warbler (which was watched near the Low Light by four observers, but eluded capture). The main fall of migrants did not arrive until 10th October, when the Principal Keeper, Mr Watt, estimated that during the evening many hundreds of Redwings came in, together with several hundred Fieldfares and Blackbirds; 5 Bramblings, 2 Snow Buntings, a Blackcap, a Garden Warbler and a Redpoll were part of this movement. Observers arriving on the island on the 12th found over 100 Goldcrests, 3 Northern Great Spotted Woodpeckers, 4 Redstarts, 2 Black Redstarts, a Red-breasted Flycatcher, 2 Mealy Redpolls and 15 Chaffinches. A Treecreeper (thought to have been of the Northern race—never certainly recorded from the May—but unfortunately not trapped), a Crossbill, and 6 Mealy Redpolls, were recorded on 13th. On the 14th a large passage of Turdidae was observed between dawn and 12.30 p.m. with over 2,000 Fieldfares, 1,000 Redwings and 100 Blackbirds coming in from the north and north-east, many passing straight over the island. Small flocks of Scandinavian and British migrants continued to arrive during the southerly winds of the next few days, and there was probably much invisible migration overhead. Several flocks of Pink-footed Geese were seen at this time, and also a Slavonian Grebe off the North Ness. On the 24th the island's first Tawny Pipit was trapped.

November. Until the Observatory closed on the 8th the May came within the circulation of a huge low-pressure system off the west coast of Scotland. This brought south-east winds, mainly strong, with varying visibility, and resulted in a series of spectacular falls of Scandinavian migrants, especially Turdidae. In five days over 700 birds (including 500 Blackbirds) were ringed.

On 1st November a Glaucous Gull was recorded, and in poor visibility on the 2nd 1,000 Blackbirds, 500 Redwings, 100 Fieldfares and 100 Starlings passed through during the day. Fresh arrivals overnight boosted the Blackbird numbers to at least 2,500 on the 3rd, when the same type of passage included 15 Song Thrushes, 12 Woodcocks and 15 Bramblings. Many birds departed on the 4th when the weather cleared but 200 more Starlings came in; movement appeared to be across the island from the north rather than in from the east and included small flocks of Greenfinches and Meadow Pipits. Seven Whooper Swans crossed the island (third record) and a very late House Martin. After the lull over 4th-5th, the wind returned to the east and strengthened, and a few Goldcrests, a Ring Ouzel and a Blackcap on the evening of the 5th were forerunners of a heavy fall during the night, when thousands of birds were seen at the lighthouse between midnight and 3 a.m. By dawn on the 6th arrivals were estimated at 2,000 Blackbirds, 2,500 Starlings, 40 Fieldfares, 50 Redwings, 30 Woodcocks, 300 Goldcrests, 3 Blackcaps, 14 Bramblings, a Reed Bunting, 2 very late Redstarts, a Yellowhammer, 4 Robins and a Water Rail (3 next day). Most of the Turdidae had left by dusk, but by dawn on the 7th, this time in fog, came further arrivals of at least 4,000 Blackbirds, 2,000 Starlings, 1,000 each of Redwings and Fieldfares and more than 150 Woodcocks (four of which were trapped, one being recovered a month later in Tipperary). Other arrivals were 20 Bramblings, 15 Chaffinches, 45 Robins, 6 Blackcaps, 60 Skylarks, 26 Snow Buntings, a Long-eared Owl and a Great Grey Shrike (both trapped). By mid-day on 8th November the movement appeared to have finished, although 3 Short-eared Owls and a Yellowhammer were new arrivals, and Skylarks were passing; only a few hundred birds remained on the island, with light west winds blowing.

UNUSUAL OCCURRENCES

Red-throated Diver :	Single birds on 31st August, 6th and 10th September. Only seven previous records.
Slavonian Grebe :	One on 13th October. Fifth record.
Storm Petrel :	One on 28th April. Third spring record.
Canada Goose :	One on 1st May. Third record.
Whooper Swan :	Seven passing on 4th November. Third record.
Woodcock :	One on 31st August, the first August record. Over 150 on 7th November, an unusually high number.
Spotted Redshank :	Single birds on 19th August and 5th September. Reported in only three previous years, none before 1958.
Little Stint :	Two on 22nd August. Recorded in only six other years.
Ruff :	Four on 31st August, one on 11th September. Recorded in only seven other years, mostly single birds.
Little Gull :	One on 10th September. Fifth record.
Woodpigeon :	Large flocks passing over from south to north on 16th December. No similar record.
Great Spotted Woodpecker :	One on 26th-30th September, two to four each day 12th-16th October (Northern race), one 20th-25th October. Recorded in only five previous years, and always single birds except in 1949.
Wryneck :	One on 23rd-25th April. Earliest spring record.
Redstart :	Two on 6th November. A very late date.
Nightingale :	One on 12th-14th May. Seventh occurrence.
Bluethroat (Red-spotted) :	One each on 25th and 29th May. Latest spring record.
Radde's Bush Warbler :	One on 8th October. First Scottish record.
Red-breasted Flycatcher :	One on 1st-2nd June. Second spring record.
Tawny Pipit :	One on 24th-25th October. First record.
Great Grey Shrike :	One on 7th, and two seen between 8th and 25th November by the Principal Keeper. Latest autumn occurrences.
Red-backed Shrike :	One on 7th October. Latest autumn record.
Crossbill :	Between 9 and 11 daily, 11th-17th July, 5 on 16th August, and single birds on 7th and 13th October. Reported in only eight previous years.
Rustic Bunting :	One on 11th-15th September. Fifth record.
Reed Bunting :	One on 3rd September. Earliest autumn record.

BREEDING POPULATION

A pair of Blackbirds nested for the first time since 1952.

Three young were raised in one of the engine-house out-buildings and were ringed on 15th July. A pair of Swallows raised two broods in the Logan's Road Hut. Again only a single pair of Pied Wagtails nested—unsuccessfully. Either 5 or 6 pairs of Wheatears bred, and probably 4 pairs of Meadow Pipits. A pair of Linnets began to build but did not persist, and left the island.

About 12 pairs of Oystercatchers were present in the breeding season and at least 8 pairs nested, although few young were reared. A pair of Shelduck probably nested on the North Plateau but the nest was not found. For the first time there was proof of successful breeding of Puffins away from the cliffs. Eight of the numerous burrows at Colm's Hole are known to have contained eggs and at least two young hatched. The Kittiwake colony at East Tarbet increased from 34 nests to 39, and hatching success was good. About 10 pairs of Fulmars hatched young and most of these were reared successfully. No estimate was possible of the huge numbers of nesting Herring and Lesser Black-backed Gulls. In 1962 these were joined by a pair of Greater Black-backed Gulls which provided the first breeding record of this species. Two young were ringed at the South Ness on 4th August.

RINGING AND RECOVERIES

2,737 birds were ringed in 1962, over a thousand more than in recent years, the highest total since 1951, and the third highest ever. The increase was due partly to the large numbers of seabird nestlings ringed, including 230 Shags and 77 Lesser Black-backed Gulls (both the highest ever), and partly to the record total of 678 Blackbirds. A new species for the ringing list was a Tawny Pipit, and nestlings ringed for the first time were Puffin (2) and Greater Black-backed Gull (2).

Other record totals were obtained for Herring Gull (232), Starling (170), Rock Pipit (111), Fieldfare (32), Puffin (24) and Woodcock (8). Equal highest totals were Pied Flycatcher (59) and Swallow (10); second highest totals were Redwing (112), Dunnock (39), Crossbill (5) and Great Spotted Woodpecker (4). Low totals were those for Whitethroat (81), Goldcrest (13), Linnet (2) and Greenfinch (1).

The only interesting retrap was a Wren ringed on 5th April 1962 and retrapped on 24th October 1962. This is the first proof of a Wren returning to winter on the island in two successive years.

The most interesting of the recoveries are listed below:

	Ringed		**Recovered**	
Kestrel	F.G.♀	20.9.57	ca. 20.4.62	Œstfold, Norway.
Woodcock	F.G.	7.11.62	8.12.62	Tipperary, Eire.
Guillemot	Juv.	14.7.62	21.11.62	Oslofjord, Norway.
Song Thrush	F.G.	4.10.59	16,2,62	Minho, Portugal.
Song Thrush	F.G.	31.3.58	22.10.62	Belfast.
Blackbird	Ad.♂	8.4.60	29.12.61	Aarhus, Denmark.
Blackbird	F.G.♂	8.4.60	2.4.62	Tejn, Bornholm, Denmark.
Blackbird	1st S.♂	8.4.62	21.10.62	Sunnfjord, Norway.
Blackbird	Ad.♀	3.11.62	15.12.62	Darvel, Ayrshire.
Whitethroat	Ad.♀	5.5.61	18.9.62	Manche, France.
Meadow Pipit	Juv.	2.8.62	19.10.62	Landes, France.
Starling	F.G.	8.11.54	Autumn '59	Attmor, Sweden.
Chaffinch	F.G.♂	2.10.59	16.10.61	Lokeren, Belgium.

In addition, a Blackbird ringed as a 1st W.♀ on 10.11.59 at Shoreham, Sussex, was recovered on the May during the Blackbird rush on 6.11.62. A Herring Gull and a Greater Black-backed Gull ringed on the May in 1954 were caught and released in the autumn of 1962 on a fishing boat near the island.

MISCELLANEOUS OBSERVATIONS

The population of rabbits on the island was higher than in 1961, despite the activities of the Principal Keeper, who with the aid of two ferrets caught about 1,000 during the year.

No appreciable change occurred in grey seal numbers. In February two seals marked as pups the previous autumn were caught and released by Keeper Manson. A single pup was born at Pilgrims Haven on 16th November (three weeks later than the one in 1961); it took to sea on 8th December.

A small bat, presumably a pipistrelle, was seen on 13th October. Only occasionally, and in summer, have bats been reported previously.

Mr G. Russell of the Port Erin Marine Biological Station spent a fortnight on the island in July 1961 studying marine algae, and published a full report of this survey in the 1962 volume of the *Transactions of the Botanical Society of Edinburgh*.

A working party from Broughton School, organised by the Conservation Corps of the Council for Nature, visited the island in April, carying out repairs to the Bain Trap, erecting artificial cover, and doing other small tasks. In October, thanks largely to the efforts of Principal Keeper Watt, a new catching box, similar to those used at Spurn, was fitted to a renewed Low Trap funnel, and showed its value in the November rush of birds.

Only a few minor repairs were necessary to the Low Light; the main improvement was the installing of a calor gas stove which proved a most successful innovation.

Apart from the visit in May of the M.S. *Meteor* on the

National Trust for Scotland's Islands Cruise, and excursions led by the S.O.C. and the Kirkcaldy Naturalists Society, there were relatively few day visitors to the May because of the bad weather most of the summer. The visit of the Migration Research Officer and the Chairman of the Bird Observatories Committee in October coincided, appropriately enough, with the arrival of the Radde's Bush Warbler.

ROSEATE AND SANDWICH TERN COLONIES IN THE FORTH AND NEIGHBOURING AREAS

G. L. SANDEMAN

Introduction

This paper details known breeding records of Roseate and Sandwich Terns in the Forth and the neighbouring terneries at Tentsmuir and on the Farne Islands, particularly since 1930. The Farnes are treated as a single area although the terns have nested on various islands, but the Forth sites are dealt with individually. It should be borne in mind that during the 1914-18 war such places as Inchkeith, Cramond Island, Inchmickery, Inchcolm and Inchgarvie were fortified and occupied, and therefore had no breeding terns. Data for the 1939-45 war are given in the tables. The older records are considered below, and those for approximately the last thirty years in the tables which follow.

OLDER RECORDS

Roseate Tern—before 1932.

In the nineteenth century there were only two breeding sites of the Roseate Tern known in the region. On the Isle of May, Jardine found the species in considerable abundance in the 1820's, but Booth found the colony deserted on the next fully documented visit in 1880. On the Farnes, Selby found it breeding on two islands in 1857, but only two to four pairs nested there between 1873 and 1930, except in 1914 when seven pairs bred—which Bolam in 1932 considered the highest total for half a century. In 1927 two pairs bred at Tentsmuir, and in 1931 Baxter and Rintoul reported finding one pair breeding with Common Terns "in the Forth area." Although the Carr Craig may not have been visited, it seems likely that, until the build-up documented in the table, the Roseate Tern, though once well established, had been a very scarce breeding bird in the north-east of Britain for at least half a century, and perhaps for twenty-five years before that.

Sandwich Tern—before 1930.

The information available about breeding colonies of Sandwich Terns in the Forth and adjacent areas before the 1930's is much more complex. On the Isle of May this species was reported breeding in the 1820's and again in the 1840's, but the island was then deserted until 1926, when one egg was found; Sandwich Terns nested again in 1927 and in 1929, with "a good many" in the latter year. Off the East Lothian coast, Jardine and Gray both refer to breeding in the 1840's, on the Bass Rock and on islets off North Berwick and Dunbar; in 1871 Gray stated that these sites were deserted, but writing again in 1875 he reported limited numbers still breeding off North Berwick; there was no further record from here until 1921, when they returned to nest on the Lamb annually until 1927, and made several attempts to nest on Eyebroughty until 1929 despite repeated robbing. On Inchmickery a few were reported breeding in 1875 and again in 1881; there was only one egg in 1887, and by 1905 their attempts to nest were described as periodic; nothing further was heard until 1924, when a colony re-established itself and continued uninterrupted into the 1930's. At Tentsmuir, what was apparently the first breeding record was in 1906, when 130 pairs nested; numbers thereafter fluctuated violently at this locality, largely according to the incidence of egg-collecting—120 pairs in 1907, one pair in 1912, none in 1913-14, 350 pairs in 1915, 300 pairs in 1916, none in 1917-20, one pair in 1921, some without success in 1922, 400 pairs in 1923; their favourite site was then spoiled by afforestation and only four pairs bred in 1924; in 1927 some 500 pairs bred on another site, and there were eight pairs in 1928, but none again from 1929 to 1932. On the Farnes, Selby in 1831 said that great numbers used to breed but had of late years been driven out by disturbance, and had colonised Coquet Island off Amble; in 1833 he implied that they were back on the Farnes again, but by 1857 he was describing the colony as a thing of the past; in 1885 there were 60-72 pairs there, next year 300 pairs, and in 1897 over 100 pairs. There were no further reports until 1925, when two fair-sized colonies set up on the islands; Sandwich Terns have nested there ever since.

As far as records go back, therefore, there is evidence of different localities suddenly colonised and as suddenly abandoned. Though this species does not ever appear to have become anything like so scarce over the whole region as the Roseate Tern, it is very possible that the desertion of the great Farnes colony between about 1850 and 1925 led to the total numbers of Sandwich Terns being markedly lower than in the first half of the nineteenth century. Certainly the 1925 recolonisation of the Farnes led eventually to a very much larger population in the region than anything we have evidence for over the previous 75 years.

NUMBER OF BREEDING PAIRS
FORTH AND NEIGHBOURING

Year	Isle of May	Lamb	Fidra	Eye-broughty	Inch-mickery	Inch-garvie
1932	Few	?	?	?	6	?
1933	Few	?	?	?	6/12	?
1934	Few	?	?	?	12/15	?
1935	5	?	?	?	?	?
1936	2/3	10	?	?	B	?
1937	0	?	?	?	20+	?
1938	1/2	?	?	?	?	?
1939	0(a)	?	?	?	0(a)	?
1940	0	?	?	?	0	?
1941	0	?	?	?	0	?
1942	0	?	?	?	0	?
1943	0	?	?	?	0	?
1944	8	?	?	?	0	?
1945	0	?	?	?	0	?
1946	15/20(f)	?	?	?	0	?
1947	8	?	?	?	0	?
1948	?2	?	?	?	?	?
1949	0	?	?	?	?	?
1950	0	?	?	80+	?	?
1951	4	0	?	20/30(c)	30/40	70
1952	0	?0	?	0(c)	4	450/500
1953	3	0	50	0	125	100(d)
1954	3	?0	50	0	200	0
1955	4/5	?0	10	0	300	?0
1956	1	?0	?	0	250+(e)	?0
1957	0	0	?	0	400(f)	?0
1958	0	0	10+	0	400(g)	?0
1959	0	0	5	0	450	?0
1960	0	0	5	0	450	?0
1961	0	0	5	0	450	?0
1962	0	0	5	0	450	0

OF ROSEATE TERNS IN AREAS, 1932 - 62

Carr Craig	Inch-colm	Farnes
20	?	?
100	?	?
B	?	?
20	?	6
20+	?	?
25	?	?
?	?	?
?	?0(a)	12/15
?	?0	12/13
?	?0	Few
?	?0	Few
?	?0	Few
?	?0	Few
?	?0	Few
?	?0	Few
75/100	?0	Few
150/200	?0	14
200/250	?0	23
50/75	?0	32
0(b)	0	29/33
0	?0	31
?0	?0	98
?0	20(c)	45
0(b)	0	70/85
?0	?0	61/76
?0	0(f)	66/76
?0	?0	42/52
0	0	33/44
0	0	58
0	0	94
0	0	(h)

Notes

Other sites. One pair bred **Tentsmuir** 1936, and 18 pairs 1956, but no other year. Two pairs may have bred **Stack,** west of Inchcolm, 1951. None known to breed since 1932 on the Bass, Craigleith, Inchkeith, Cramond Island, or the Cow and Calves.

Abbreviations

B—Bred, not necessarily successfully, but no information on numbers.

0—None bred (confirmed).

?0—Presumed nil, from general knowledge of situation.

?2—Breeding not certain.

?—No information.

Totals. It must be realised that many figures are approximations.

Footnotes

(a) Island fortified and/or occupied by services.

(b) Ground fouled and vegetation dead; Herring Gulls nesting—fouling began 1949.

(c) Suspected rats sucking eggs.

(d) Desertion probably caused by rats sucking eggs.

(e) Disturbance by pet dog which allowed gulls to get at eggs.

(f) Services personnel removed.

(g) Original site fouled and unused; fouling began 1954, and colony began to spread to new area.

(h) Figure will be published in due course.

NUMBER OF BREEDING PAIRS
FORTH AND NEIGHBOURING

Year	Isle of May	Fidra	Eye-broughty	Inch-mickery	Inch-garvie	Carr Craig
1930	50	?	0	?	?	?
1931	50(j)	?	0	B	?	?
1932	Fewer	?	?	?1/2	?	1/2
1933	100	?	?	?1/2	?	0
1934	10	?	?	33	?	Few
1935	113+	?	?	?	?	175
1936	4	?	?	B	?	Many
1937	0	?	?	100	?	2
1938	Some	?	?	?	?	189
1939	0(a)	?	?	?0(a)	?	?
1940	15	?	?	?0	?	?
1941	?	?	?	?0	?	?
1942	25/30	?	?	?0	?	?
1943	25/30	?	?	?0	?	?
1944	140/150	?	?	?0	?	?
1945	0	?	?	?0	?	?
1946	1400/1500	1	?	?0	?	?
1947	(86R)	?	?	0	?	30/50
1948	(434R)	?	?	?0	?	150+
1949	(192R)	?	?	?0	?	150+
1950	600	?	Some (b)	?0	?	100+
1951	500	?	0	0	0	0(c)
1952	25	B	0	0	100	?0
1953	100—	100	?0	100	12(d)	?0
1954	100/150	200	?0	70+	0	?0
1955	190	200+	?0	50	?0	0(c)
1956	12—	?	?0	B(e)	?0	?0
1957	0	?	?0	400(f)	?0	?0
1958	0	?	?0	450+	?0	?0
1959	0	70	0	630+	0	0
1960	0	?	0	300+	0	0
1961	0	300+	0	350+	0	0
1962	0	520+	0	600+	0	0

OF SANDWICH TERNS IN AREAS, 1930 - 62

Inchcolm	Tentsmuir	Farnes
?	0	Increase
?	0	1500/2000
?	0	2000
?	100 or 1000 (k)	(Bred 1933-38 but numbers down.)
?	(Average 300/400, 1934-42) (g), with 500 in 1939.	
?		
?		
?		
?0		
?0(a)		2000
?0		(Bred 1940-43 fair numbers.)
?0		
?0		
?0	0	
?0	0	65
?0	B	130
?0	Few	120
?0	0	300
?0	0	410
?0	0	368
?0	0	965
?0	22	1100+
?0	?0	1250+
?0	9	958
20(d)	1	960
0	1	1590
?0	48	1975/2485
0(f)	?0	800/1000
?0	?0	540/600
0	?	1248/1340
0	?	1217/1767
0	?	1505/2005
0	?	(h)

Notes

Other sites. 1/2 probably bred on **Stack,** west of Inchcolm, in 1951. 20 bred at **Cult Ness,** Rosyth, in 1955. Since 1930 breeding has not been recorded on the Bass, Craigleith, the Lamb, Inchkeith, Cramond Island, or the Cow and Calves.

Abbreviations

B—Bred, not necessarily successfully, but no information on numbers.

R—Number of chicks ringed.

0—None bred (confirmed).

?0—Presumed nil, from general knowledge of situation.

?2—Breeding not certain.

?—No information.

Totals. It must be realised that many figures are approximations.

Footnotes

(a) Island fortified and/or occupied by services.

(b) Attempted to breed, but robbed.

(c) Ground fouled and vegetation dead; Herring Gulls nesting—fouling began 1949.

(d) Desertion probably caused by rats sucking eggs.

(e) Deserted, probably as a result of disturbance by pet dog letting gulls get at eggs.

(f) Services personnel removed.

(g) Forced to leave before eggs hatched in 1942 by artillery gunfire.

(h) Figures will be published in due course.

(j) Total from comparison of Rintoul & Baxter 1935 with Eggeling 1960.

(k) Baxter & Rintoul refer to 100 pairs; Grierson to 1000. It has proved impossible to reconcile these figures. In answer to enquiries Mr Grierson says that his figure was based on information obtained locally since the 1939-45 war.

RECENT RECORDS

The tables which appear on the preceding four pages give in summary form all information which it has been possible to gather on the numbers of Roseate and Sandwich Terns breeding in the Forth and neighbouring areas since the early 1930's.

CONCLUSIONS

Roseate Tern. Since the end of the 1939-45 war, and possibly earlier, there has been a single large colony in the central Forth area; at first on the Carr Craig until 1950 when the site had become fouled and devoid of vegetation; next on Inchgarvie until driven away by rats in 1953; and since then on Inchmickery. It can be seen that when conditions have remained suitable for them the birds have been very faithful to their breeding islands. It is now very difficult to arrive at an accurate count of the Roseate Terns in the large mixed ternery on Inchmickery—where there are also big numbers of Common and Sandwich, and some Arctic Terns—but it is hard to come to any other conclusion than that, since at least 1952, there has been a fairly steady breeding population in central Forth of some 400 to 500 pairs of Roseate Terns. From 1946 to 1962 some 3,500 nestlings of this species have been ringed in the Forth, with a maximum of just over 400 in any one year. This summary, it should be noted, accounts for virtually the whole population of Roseate Terns on the east coast of Britain. It is perhaps worth observing also that, although terns may have been driven from the Isle of May by big numbers of the larger gulls breeding there, these gulls do not appear to have had any effect on the total population of Roseate Terns in the Forth.

Sandwich Tern. Whereas, in the area considered in this paper, the Roseate Tern has its headquarters in the Forth, the majority of Sandwich Terns breed on the Farne Islands. It is not possible to sum up the situation so neatly as with the Roseate Tern, but taking the long view it might be said that the normal population of Sandwich Terns for the Farne Islands, the Forth and Tentsmuir over the past thirty years has been about 2,000 breeding pairs. It is most interesting to note how during this period the total population has tended to fall between 1,500 and 2,500 pairs. As with the Roseate Tern, it can be seen that total numbers in the Forth have been well maintained in spite of increased numbers of the larger gulls breeding there.

ACKNOWLEDGMENTS

Much of the recent detail in the tables has not previously been published, but is based on my own observations and on information generously supplied by other observers—notably

W. Auld, A. G. S. Bryson, Dr W. J. Eggeling, L. Fullerton, Mrs G. Hickling, K. S. Macgregor, J. H. B. Munro, R. Seath, R. W. J. Smith, and G. Waterston. I am grateful also to the editors of *Scottish Birds* for much assistance in framing this paper.

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MIGRANTS AT ST KILDA IN 1962

W. E. WATERS

Introduction

This paper covers migration at St Kilda between 19th March and 5th September 1962. I was off the island for only two weeks, and during this period from 25th July until 8th August records were kept by A. Tewnion. Several observations were contributed by Malcolm Smith, the Nature Conservancy warden, and in June by Dr J. Morton Boyd. The spring migration is discussed in some detail, as prior to the armed forces occupying Hirta little was known about this period—particularly the earlier part. The early autumn migration in 1962 followed much the same pattern as in the previous year (Waters 1962); and the spring passage is compared with my autumn impressions. Village Glen was searched twice daily during both spring and autumn passages, and the rest of Hirta was covered as time and weather permitted.

SPRING MIGRATION

Late March saw a considerable movement of Redwings and Blackbirds, and both species continued to pass in some numbers until the second week of April. Other March migrants were Lapwings (up to 16), Meadow Pipits and single Woodcock, Purple Sandpiper, Skylark and Robin.

In general the spring of 1962 produced more sustained migration than either autumn. New arrivals were suspected on almost every day throughout April and May and during the first three days in June. This is in marked contrast to the autumn, when days or even a week passed with no evidence of bird movement. Of the four commonest migrants at St Kilda, the Golden Plover alone showed a decrease compared with the previous autumn's numbers, whereas the Wheatear, and to a lesser extent the Meadow Pipit and White Wagtail, had a heavier spring passage. From a study of 1957 and 1958 records this heavier spring passage of most species has been noted (Eggeling 1959). The most interesting exception in the spring of 1962 was that Merlin passage was no stronger than in the previous autumn. Redwings, presumably mainly birds of the Icelandic race *coburni,* seem to have an equally strong passage at both seasons. The existence of Lapwing and Blackbird passage in late March and early April has not been recorded, although observations at this time of year are scanty. Of the other waders, Ringed Plover, Snipe and Curlew passed in roughly the same numbers, Whimbrel, Redshank and Dunlin had a heavier spring passage, Turnstone and Sanderling a weaker passage, all compared with the previous autumn.

There was a considerable goose passage, with both Grey Lag and Barnacle feeding on the Cambir, which was covered with numerous goose droppings. Each of three large skeins flying NW past the island was seen between mid-day and 1800 hours, which may indicate an origin in Ireland. On these occasions the wind was twice from the south and once NE. As well as the geese noted in the systematic list, grey geese were seen as follows: 45 on 14th; 11 on 27th; 12 on 29th; 20 on 30th April; and a skein of 50 seen from a vessel on 1st May was flying NW between Hirta and Boreray, a few hundred feet above the sea. This observation may indicate that because of the great height of the islands' cliffs geese may fly around St Kilda rather than over it, and hence remain unseen by an observer watching from Village Glen.

Some visible migration of passerines was observed. Meadow Pipits and White Wagtails were seen arriving in the late morning or early afternoon on several calm days in April and May. They appeared from a SSE direction, coming in across Village Bay from a line with Gob an Duin and making landfall between Point of Coll and Geo Mor at the easterly side of Village Glen. Some Wheatears also appeared to make landfall here though none was actually seen arriving. All three species then moved slowly westwards across the glen in the next few hours, either along the boulder beach and backing erosion scarp or along the line of the perimeter wall. With the Meadow Pipits and White Wagtails this movement was followed by watching birds ringed near the Manse or at the eastern extremity of the boulder beach. Few ringed

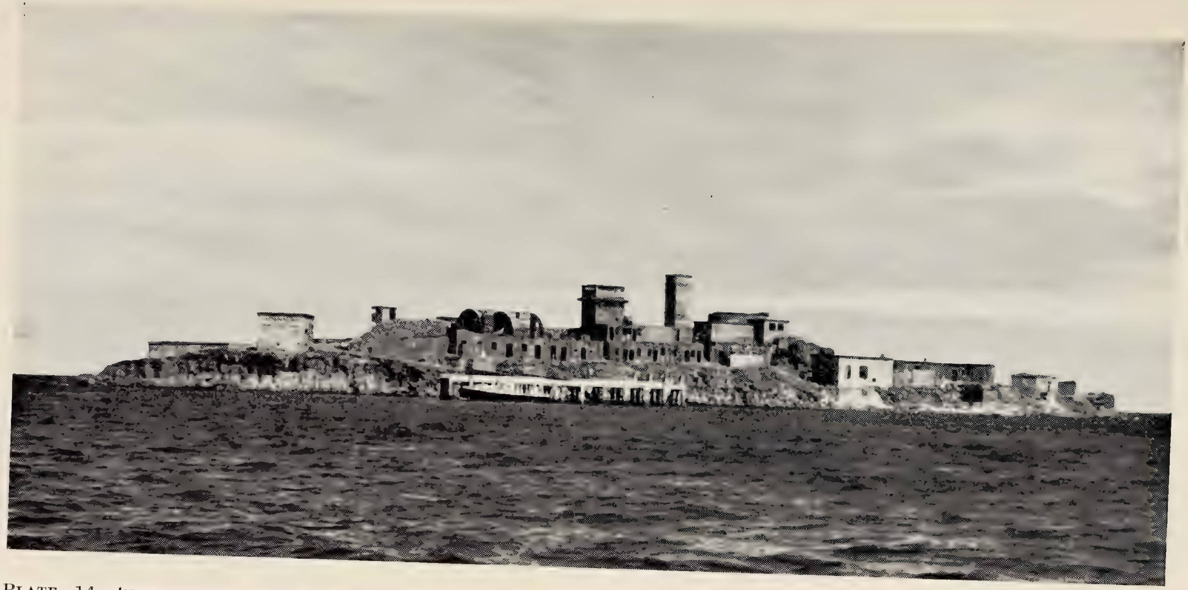

PLATE 14. INCHMICKERY, Firth of Forth, from the south-west. This R.S.P.B. Bird Reserve has recently been confirmed as a statutory Bird Sanctuary by the Secretary of State for Scotland. The terns breed mainly on the far side of the island (see page 286).

Photograph by A. T. Macmillan.

PLATE 15. ST KILDA. The old storehouse where four pairs of Tree Sparrows were found breeding in 1962. (see page 310).

Photograph by W. E. Waters.

birds were to be seen anywhere in the Glen 24 hours after ringing. In the autumn of 1962, however, one of three White Wagtails ringed was seen four days later and another a week after ringing. This agrees with my general impression that migrants pass through quicker in the spring than in the autumn.

During the spring passage the arrival of migrants was less dependent on the direction of the wind than in the autumns. Icelandic migrants in particular were noticed during both easterly and strong westerly winds. On 23rd May the wind was NW force 6; visibility was good but the wind was strong enough to hold up several birds probably heading for Iceland, including a Great Northern Diver, a Tufted Duck, two Whooper Swans, and some passerines.

Almost all the spring migrants had passed by the end of the first few days in June, but it was then that the rarities started—a Red-headed Bunting arriving on 7th, a Buff-breasted Sandpiper recorded on 15th, and a female Rock Thrush two days later. A Grey-headed Wagtail on 2nd July completed this unusual group of vagrants.

SEA WATCHES

Sea-watching from the islands and headlands of Britain is becoming a popular occupation among ornithologists. Little sea-bird movement seems to pass close to St Kilda. I watched from several places and found the most satisfactory was on the sheep track encircling Oiseval about 100 feet above the sea and looking out towards Levenish. Several hours were spent in 1961 and in 1962, mainly in August and September, watching from this point with 10x50 binoculars. Excluding the common local sea-birds, the only movement detected was of Manx Shearwaters passing SW about two miles offshore. The highest number was 19 in 40 minutes on 12th September 1961; and though some movement was usually to be seen it was much less than this. The possibility of these being local breeding birds is thought unlikely as they were only observed in early autumn and all were flying in the same direction—to the SW.

SPECIES LIST

The following list includes all migrants seen between 19th March and 5th September 1962. All records are for Hirta.

Great Northern Diver. One on 23rd May and 10th June.

Mallard. A drake on 7th July.

Teal. A pair on 28th April; one on 18th May and one on 18th Aug.

Wigeon. Two on 25th May.

Tufted Duck. A drake on 23rd and 24th May.

Scaup. Two drakes on 31st May, one remaining until 10th June. The only previous record was in May 1957.

Red-breasted Merganser. Single drakes, 24th to 26th May, 1st and 4th to 7th June.

Grey Lag Goose. 12 on 28th April; up to four on four dates in May, and a single bird seen occasionally until 28th June.

Pink-footed Goose. 12 on 14th April. Many of the "grey" geese were probably of this species.

Barnacle Goose. 27 on 27th and 41 on 28th April, both flocks grazing on the Cambir.

Whooper Swan. 13 on 11th and 12th April; two on 23rd and 5 on 28th May; two on 17th and 18th June. There are no previous June records.

Peregrine. Recorded on seven dates between 22nd March and 9th July but breeding was not suspected, although Soay and Boreray were not visited.

Merlin. Single bird on seven dates between 13th April and 13th May.

Kestrel. One on 20th, 21st and 28th April, 6th May and 17th and 18th June.

Corncrake. One seen on 4th and 8th May.

Lapwing. Passage in late March with 16 on 22nd, and in April until 29th. An immature bird on 23rd June and seven on 12th, five on 15th and one on 17th July.

Ringed Plover. Up to three between 8th May and 10th June. Autumn passage started with four on 21st July and up to seven in late August.

Golden Plover. Spring passage between 2nd and 28th April with maximum of 31 on 16th; one on 13th June. Return passage started with four on 22nd Aug, the first flock being 16 on 5th September.

Turnstone. Spring passage peaked at 19 on 5th April and continued into first week of May with occasional birds until 14th June. Autumn passage started with 3 on 7th August; 30 or more on 26th.

Snipe. Movements difficult to detect because of wintering and breeding birds but there was an increase from mid April until the end of the first week in May.

Woodcock. Single birds on 25th March and 27th May.

Curlew. Single birds on 28th April, 10th and 18th May and between 8th and 15th July. Four on 27th August, then one or two on several days until 5th September.

Whimbrel. The usual well marked spring passage occurred between 28th April and 23rd June with maximum of about ten on 17th May. The only autumn notice was of one on 2nd September.

Redshank. Up to three on many days between 12th April, the earliest St Kilda record, and 30th May. Rather less numerous on autumn passage but five seen on 21st July.

Knot. None in spring, when this species is rare. Passage from 24th July, with flock of 15 from 21st August and a dozen still on the island when I left.

Purple Sandpiper. One on 25th March; two on 1st, 3rd and 21st April.

Dunlin. Spring passage began with one on 3rd May, and peaked with 13 the following day. Recorded in each month to September but rather less common on return passage with maximum of eight on 21st July.

Sanderling. One on 3rd June; eight on 21st July, and main autumn passage with up to eight from 20th August until I left.

Buff-breasted Sandpiper. Dr J. Morton Boyd and Malcolm Smith had excellent views of one on Gob Na H-Airde on 15th June. This record has been accepted by the Rarity Records Committee of "British Birds" and is a new species for St Kilda.

Ruff. Two juveniles on 17th August, one remaining until 22nd; another bird on 1st September.

Common Gull. Recorded fairly regularly between 2nd May and 24th July, with maximum of five on 15th July.

Little Gull. One immature on rocks below the Manse on 15th May. First record.

Black-headed Gull. A rather more regular visitor than the Common Gull; seen between 2nd April and 1st September, with maximum of 5 on 26th August.

Woodpigeon. One on 5th June. It is interesting that ringed racing pigeons are much more frequent than the Woodpigeon, at least half a dozen being seen in the summer of 1962.

Swift. Three on 1st and four on 5th May are the earliest St Kilda records. One or two seen on seven dates to 23rd July.

Skylark. One on 21st March and one or two on five dates in April.

Swallow. One on 15th and two on 16th April are the earliest St Kilda records. Up to three were seen on many dates until 17th July.

House Martin. One to three seen between 2nd and 18th June.

Rook. One in exhausted condition during NW gale on 1st April.

Jackdaw. One from 14th to 16th April and 7th to 13th May. The only two previous records were both in December.

Rock Thrush. A female was seen on the Glen Mor side of the Mullach Bi ridge on 17th June. This record is under consideration by the Rarity Records Committee.

Fieldfare. One on 2nd April.

Song Thrush. One seen on 19th, 21st and 24th April is the only spring record this century.

Redwing. The small wintering population had increased to about 40 on 19th March and 60 on 25th. The main passage occurred during the first half of April with a peak of about 80 on 12th. Four were seen on 3rd May but thereafter only occasional single birds until 17th June.

Blackbird. Marked passage in late March and early April with up to eight in a day, mostly males. One late male on 26th May.

Wheatear. First recorded on 14th April, but main passage during the second half of May and first week in June. During this period up to 60 were seen in Village Glen and about 200 were estimated on Hirta on 27th May. As usual, the return passage was much less marked, migrant birds being noticed from 16th August, and 20 was the maximum seen in Village Glen.

Black Redstart. A female on 14th May at the foot of Oiseval. Second record.

Robin. One between 28th March and 5th April was trapped and found to be of the Continental race "E. r. rubecula." Single unringed Robins were seen on 13th and 21st April. There are only two other spring records.

Sedge Warbler. One on 30th April—the earliest for St Kilda.

Garden Warbler. One on 12th June in irises near Tobar Childa.

Willow Warbler. One or two between 28th April and 3rd May; two on

10th May; one on 13th August. Usually this species is more numerous in autumn than in spring.

Meadow Pipit. First record on 21st March, with ten the following day. Main passage from 27th April to 3rd June, with up to 80 in Village Glen. Return passage first noticed on 12th August, with up to 30 birds seen in Village Glen in early September, and the Hirta total estimated at 200 on 2nd.

White Wagtail. Nine on 25th April increased to about 40, all in Village Glen, by 28th. Passage continued less strongly throughout May, and two remained until 2nd June. One White Wagtail with a lame right leg remained around Village Glen from the end of May at least until 5th September. Return passage started with three on 8th August; 12 was the maximum seen in any day. A single **Pied Wagtail** was seen on 17th, 21st 24th and 27th June.

Grey-headed Wagtail. A male on 2nd and 3rd July is the fourth record for "M. f. thunbergi" although the British race of the **Yellow Wagtail** "M. f. flavissima" has yet to be recorded at St Kilda. This bird was remarkably wary, taking cover in the beds of irises, and rising well before approached, when its flight note, similar to that of "M. f. flavissima" but shriller and higher in pitch, drew attention to the bird. The dark head with darker, almost black, ear coverts, the absence of an eye-stripe, and yellow underparts extending to meet the dark head were all clearly seen on two separate occasions.

Crossbill. Flock of about 25 feeding in Glen Mor on 8th July; a flock of about 30 flew westwards over Village Glen on the evening of the following day and probably joined the first flock as about 50 were seen on 17th. Last recorded on 4th August.

Chaffinch. A male on 5th April; a female on 14th and 15th.

Red-headed Bunting. A male in fine plumage but showing less red on the face than the plate in "The Handbook" was first seen on 7th June. The bird was also seen by several members of the National Trust for Scotland camping party and by Dr J. Morton Boyd, and has been accepted by the Rarity Records Committee. There is a previous record in May 1957 (Williamson and Boyd). The bird was tame at first but soon became more wary. It remained in Village Glen until 3rd July. A bird in similar plumage was seen on 25th August and was probably the same individual.

Reed Bunting. A female in Village Glen on 28th May. Second record.

Lapland Bunting. A very tame one on Gob Na H-Airde and one on Mullach Geal on 2nd September.

Snow Bunting. Four on 7th and one on 8th April.

House Sparrow. A female among the breeding Tree Sparrows on 5th, 6th and 8th May, 2nd, 3rd and 15th July and 14th August.

ACKNOWLEDGMENTS

I am indebted to Dr J. Morton Boyd, A. Tewnion and M. Smith for their observations and to the Nature Conservancy for access to their St Kilda records.

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IMPRESSIONS OF THE FIFTEENTH S.O.C. CONFERENCE, DUNBLANE, 1962

To be pointing the car north out of England for the first time in 1962 was good: to be heading in a standard direction for Dunblane and our second S.O.C. weekend, was even better. Friday 26th October was a beautiful day, with geese etched against clear blue skies a common sight throughout lowland Scotland. Several members found Loch Ken on their northward route, no better spot to brush off the dust of London, Manchester, or even the bureaucratic centre of British ornithology, and get their spirits set on the correct S.O.C. level. Seriously, it is not possible to attend the conference weekend with any doubts as to the enjoyment and pleasure it will give to all participants.

From the first cheery hallo, the 1962 conference was convivial ornithology at its best. At a time when world peace was balanced on a nervous button, the immediate and cheerful coexistence of members, speakers and guests in the bar of the Dunblane Hydro showed what a well-loved common interest could achieve. On the first evening, the ballroom, turned lecture hall (but strangely equipped with a tinkling form of central heating), soon filled to hear and see unofficial contributions by members—curtain raisers to the main events of the next two days. The conference office was, as usual, more of an exhibition than a registration desk. Notable among the exhibits were an advance copy of Dr D. A. Bannerman's penultimate volume of his monumental *Birds of the British Isles,* and a pleasing selection of J. A. Anderson's paintings and sketches.

On Saturday the 29th, after a short address of welcome by the Provost of Dunblane, we began serious listening. Dr K. H. Voous opened the truly international conference with a review of the geographical distribution and species formation of birds of prey, illustrated alternately with distribution maps from his own *Atlas* and pictures of the species under discussion. Dr Voous pointed to relationships in habitat preference and morphology, some expected and some surprising, and clearly nobody who listened failed to be impressed by his skill in talking clearly and simply on a complex subject. Questions from the floor showed that many members were disciplined to look for more than mere resemblance or dissemblance in discussing speciation, but Dr Voous was never tripped, receiving well-deserved applause at the end of a much appreciated lecture.

After the coffee break we came face to face with Heinz

Sielmann and the magic of his camera. One had heard that his films of Peru and the Galapagos, though made after others, were good, but the opening shots of cloud-spilling cliffs shouldering the Humboldt Current away from the Andes showed that they were no less than remarkable documents. We saw a world area where nothing bridges success and failure but death or successful evolution to a highly adapted life. Heinz Sielmann's colour films showed us the incredible sea-fowl isle of Chincha (the sequence of a dying cormorant watching condors waiting out its last moments would have roused even the *Observer's* film critic!) and much of the Galapagos avifauna. Spontaneous applause punctuated each film, but it was clear that, incredible as the Woodpecker Finch's grub-tickling was, it was the bugling yet tender courtship of the albatrosses which won everybody's heart: our mollymauks could do with some instruction! One cannot grant anything less than the highest praise to Herr Sielmann's patience and talents.

The afternoon excursions were made under the continual threat (and occasional arrival) of large rain, but most people saw grey geese, including a flock of 2,000 Grey Lags in the middle of Flanders Moss, while other species encountered were Buzzard, Hen Harrier, Black Grouse, and Crossbill.

In the evening, following the Annual General Meeting, we sat down to a dinner full of good fare, both edible and audible. The speeches varied from the rebellious to the serious, with Dr R. Carrick at one point suggesting to the "management" of Scottish ornithology that emus should run with cattle in Galloway, and Dr Voous wishing us an eruption from Rothiemurchus not of Ospreys but of Crested Tits. Some sang later.

On Sunday the 30th the morning began with Dr Carrick talking about the Royal Penguin; his lecture, like those of the day before, was to widen our horizons from ducks and waders. It was illustrated by a colour film which included an amazing sequence of a mile-long waddle of thousands of penguins from surf to rookery. After this fascinating glimpse of the far South, we were brought home to Europe by the famous "Woodpeckers" film; and "Wild Scotland," a rather surprising product of Dr Beeching's, which included the only sequence of wild cat known to us. All too soon, however, the morning came to an end, and with it, the conference. It had been a great success, and the thanks of every attending member are due to the organisers. Well done again!

IAN (D. I. M.) and KARIN WALLACE.

NORTHERN COUNTIES CONFERENCE, INVERNESS, 1962

The conference, which was attended by over thirty members, was held in the Kingsmills Hotel, Inverness, during the weekend from 30th November to 2nd December 1962. The success of this new venture was undoubtedly due to the efforts of the Secretary, Mrs George Waterston, and the Chairman, Dr Ian D. Pennie. Special thanks are due to Inverness members for their assistance. Mr Matheson and Mr Fasham, Development Officers for Inverness-shire and Sutherland respectively, were welcome guests.

Three exceptionally interesting papers were read on Saturday morning. Dr G. M. Dunnet referred to the techniques used in ringing and marking Fulmars in his study of the species on Eynhallow. In addition he had set up a fascinating exhibit, illustrated by maps, diagrams and graphs, showing various aspects of the investigation and some results so far obtained. The Eider was the subject of Harry Milne's talk. In his study of the species on the Ythan Estuary he has discovered that the mortality rate of ducklings reaches the startling figure of 95%. The main cause of destruction has not yet been traced, but it is known that gulls account for many deaths. Mr Milne's statement that in his opinion the live chicks appeared healthier than the dead ones was greeted with some hilarity. Derek Mills spoke about the Goosander and the Red-breasted Merganser and their relation to salmon fisheries. Figures showing their consumption of salmon fry indicate that their presence in any numbers on salmon rivers may be damaging. After a pleasant afternoon excursion, at which the famous and enigmatic Inverness white gull was on display and examined critically, members reassembled after tea and David Wilson gave a short talk on the aims and enquiries of the B.T.O.

Opening the discussion which followed the first two lectures on Sunday morning Lt.-Col. J. P. Grant said that they were the finest he had ever heard in one morning and that they came down to the bedrock of our Highland problems. These papers were Dr Pennie's "Highland birds—past, present and future" and Dr W. J. Eggeling's "The work and aims of the Nature Conservancy in north Scotland." Dr Pennie referred to the denudation of the Highlands caused by burning and sheep grazing, whereby the indigenous pine forests have been lost and the birch woods are likely to follow. In the last 100 years in the County of Sutherland 22 species of birds had either been lost or had decreased alarmingly due to human activities. Islands in lochs showed how rich the Highland vegetation could be, and he suggested fencing areas by the shores of lochs so as to encourage the natural regeneration of the plant life. The speaker also suggested that much good work could be done by bird-watchers in the north Highlands, in tracing the changes in bird species and populations which accompany changes in land use—particularly the change to afforestation. He also suggested that the S.O.C. might profitably undertake an enquiry into the distribution of the Ptarmigan in Scotland. The success of the Osprey operation, the handing over of Handa as a nature reserve, and the increasing interest taken in wildlife by the tourist, are only a few examples which indicate a new outlook towards conservation. The prime step taken in conservation, however, has been the setting up of the Nature Conservancy. Dr Eggeling gave a full and lucid account of the establishment and management of nature reserves and, in particular, referred to the reserves and proposed sites situated in the northern counties. Roy Dennis concluded the morning's session with an entertaining talk on the encouragement of rare breeding species, in which he put forward some excellent ideas for attracting these visitors on a wider scale.

One of the outstanding features of a most enjoyable conference was the setting aside of the evenings for informal discussion. Among some of the more interesting subjects discussed were the publication of local bird bulletins and the setting up of S.O.C. Branches in remoter areas.

D. MACDONALD.

SHORT NOTES

AUTUMN MOVEMENTS OF SHEARWATERS, SKUAS, AND OTHER SEA-BIRDS IN NORTH SUTHERLAND AND EASTER ROSS

These notes have been provided because of the dearth of published records of shearwaters and skuas in Sutherland. A Manx Shearwater seen by me off Farr Point, North Sutherland, on 8th July 1961 is the first for the county, if we except the vague statement of Harvie-Brown and Macpherson in *A fauna of the North-West Highlands and Skye,* and few Great Skuas have been recorded. While staying on Island Roan from 3rd August to 13th September 1962, however, I saw both these species and Sooty Shearwaters commonly.

Westward passage of shearwaters was recorded on more than half the days during this period, but it was best in early August, and with high winds with a westerly component, rain and poor visibility. Peak counts of Manx Shearwaters were on 10th, 12th and 25th August, with 52, 150 and 80 per half-hour respectively, and there was a Great Shearwater with them on the 10th. Sooty Shearwaters were more erratic and numbers bore little relation to those of Manx—thus, in 45 minutes on 5th August there were 10 Sooties to 38 Manx, but after six on 10th and 12th they were seen on only five dates between 24th August and 9th September, and never more than three in one day. On two of these days there was no visible passage of Manx, and this was thought to be because the Sooties passed closer inshore on calmer days.

Island Roan may well be within the feeding range of skuas breeding in Orkney. All the Arctic Skuas seen were in August —single birds on five dates to the 31st, three on the 5th, and two on the 20th—the last few days of August seeing the dispersal of the local colonies of Kittiwakes. Great Skuas were passing both ways until 19th August, with up to eight in a day, though 70% were flying west. After this date all seen were flying west, in gradually lessening numbers, the change coinciding fairly well with the sighting on the 24th of the first juvenile. This may therefore have been post-breeding dispersal from the Orkney colonies.

Ian R. Downhill.

The table which follows gives details of the numbers and direction of movement of shearwaters and skuas, and some other sea-birds, seen by us off Tarbat Ness, Easter Ross, during September 1962.

Date	**Period of watch**	**Manx Shearwater**	**Great Skua**	**Pomarine Skua**	**Arctic Skua**
15th	1100-1300	8SE, 4NW	1SW	1SE	jv
16th	1145-1345	1SE, 23NW	2SE		
	1600-1700	3NW			ad+1SE
17th	1400-1700	1NW	3SE	2ad+2jvSE	
	Strong N to NW winds; heavy passage of Gannets, Kittiwakes, Fulmars and auks, with counts during the watch of Sooty Shearwaters (2NW), Fulmars (1,000+NW) and auks (173NW).				
18th	0630-0700		1NW		ad+2jvNW
	1030-1200	6NW			
	1500-1700	1NW	1SE	1jvNW	
	This was the day of heaviest auk passage (320NW).				
19th	1130-1200	No movement seen.			
	1515-1700	3SE, 84NW		1jvNW, then SE	adNW
	Includes flock of 61 Manx Shearwaters close inshore.				
20th	1130-1230				ad+3jvSE
	1400-1630	3NW			ad+2jvSE ad+2jvNW
21st	No movement seen during day.				
22nd	0915-1030		1SW		3jvSE

David Shepherd, Nigel Simpson.

(These interesting notes provide, so far as we can trace, the first published records of Manx Shearwater for North Sutherland, East Ross, and Moray Basin; Great Shearwater for North Sutherland, and North Coast; Sooty Shearwater for North Sutherland, East Ross, and Moray Basin; Pomarine Skua for

East Ross; and Great Skua for North Sutherland, and East Ross. In his recent paper (*antea* 2: 182) Dr Pennie hints at records of Great Skuas in North Sutherland, but these have not been published.—ED.).

SURF SCOTER IN ORKNEY

On the forenoon of 21st October 1962, in good light, along with Miss E. R. Bullard and Mr and Mrs S. Luke, I observed a drake Surf Scoter in full plumage at Echnaloch Bay, Burray. It was with a group of Velvet Scoters and appeared to be of identical size, but the profile of the head was different, more closely resembling that of the Eider. Its massive bill of bright red, yellow and white, the square white patch across the forehead, the triangular white patch on the back of the head and neck with the apex pointing downwards, and the bright reddish-orange legs, contrast strikingly with the rest of the glossy black plumage, and combine to make this rather strange looking duck unmistakable.

Most of the bird books state that the Surf Scoter is more often seen in Orkney waters than elsewhere in the British Isles, but it does not appear to have been reported in Orkney during the past 40 years at least.

E. BALFOUR.

SNOW AND ROSS'S GEESE IN SCOTLAND, AND THE PROBLEM OF ESCAPES

We have been sent records by several contributors, referring to two, or perhaps three, white geese in southern Scotland, which were suspected by independent observers to be Ross's Geese. Details are given below, together with the main reasons why we do not feel able to accept this tentative identification without reserve.

Irrespective of their specific identification, the occurrence of these birds raises once again the vexed question of escapes of white geese of all kinds in this country. We asked the Wildfowl Trust about this, and received the following important comments from Hugh Boyd:

> "*Free-flying Snow Geese in Britain.* From the information available to the Wildfowl Trust it appears likely that free-flying individuals of Lesser Snow and Greater Snow Geese are escaping from collections in widely scattered parts of the country with increasing frequency. The market is saturated, so that breeders are taking little care to pinion birds or to make sure that those left unpinioned are feather-cut after each wing-moult.
>
> "The majority of escapes are likely to be Lesser Snows of the white phase, which are the most widely kept and

> breed most readily. Blue Snows are rather less common and Greater Snows much less. The most likely sources at present are in south-east England, though at least three Scottish collections include free-flying Snows. The Wildfowl Trust has full-winged Lesser, Greater and Ross's Snows at Slimbridge.
>
> "Ross's Geese are still scarce and high-valued, but three full-winged birds are known to have escaped in 1961—two together from Slimbridge and another from a collection in Dunbartonshire. The exact dates of departure have not been recorded."

Two conclusions seem inescapable. Firstly, even if the birds were to be accepted as Ross's Geese, the possibility that they originated in captivity in this country cannot be discounted. Secondly, since so many more appear to be straying from captivity than was thought, it is difficult to regard the growing number of Scottish records of any race or colour of Snow Geese in recent years as any better than "probable escapes."

This does not, of course, preclude the interesting probability that, despite their apparently domestic origins, Scottish Snow Geese seen in company with Pink-footed Geese fly north with them each spring and return each winter. Apart from the bird at Cobbinshaw mentioned below we know of no records of any of these extremely conspicuous white geese being seen in Scotland in summer, and there have been repeated instances of Snow Geese seen flying in or arriving with flocks of Pinkfeet. It seems that we are faced with the interesting phenomenon of a "feral" bird successfully undertaking regular annual movements over hundreds of miles of open sea. Such a thing is perhaps not without precedent, for the breeding of a pair of Barnacle Geese in north Sweden in 1952 may well have originated with the escape of a flock of hand reared birds from a collection at Tayport, Fife, in March 1948; ringing recoveries proved that some at least of the Tayport birds went to the north of Scandinavia that month, and that some reappeared on the Tay during the following winter (per Dr J. Berry). We would, in any case, urgently request readers to continue to send us records of white geese as before, with the fullest possible particulars, to enable us to keep track of new developments and to try to establish conclusive proof of either summering or long-distance movements.

Two small white geese were seen at White Loch, Castle Kennedy, Wigtownshire, on 14th November 1961 (A. F. Airey), and near Dunragit on 2nd January 1962 (A. D. Watson). Both observers commented that the birds were appreciably smaller than the Grey Lag Geese with which they were seen; they kept together as a pair, and one bird was a little larger than the other (ADW). The same two birds were said to have been in the area since at least the third week in October, and were reported near Bridge of Dee, Kirkcudbrightshire, on 6th January, and again on 1st February, and thereafter seen several times in company with Grey Lags by many people until the 18th; it was now confirmed that both were ringed, the larger on the right leg, the smaller on the left, which increases the probability that they were escapes, although it is known that large numbers of white geese, especially Lesser Snow Geese, have been ringed in the wild in North America.

ADW has sent very full notes on these birds, giving the following grounds for thinking that they may have been Ross's Geese: firstly, their bills were very small, hardly more than half the size of those of the associated Grey Lags, and very similar in size and shape to the bill of a solitary Pink-footed Goose also available for comparison; secondly, the bills were pinkish-red with a grey patch at the base of the upper mandible, the nail not noticeably pale, and there was little or no sign of a dark cutting edge; thirdly, the necks were rather short, and the heads had a high-crowned, rather rounded appearance. On the other hand, though geese can be very variable in size, ADW considered them "presumably too large" for Ross's Geese; even making allowances for a white bird appearing large among dark associates, he considered that they might be as big as a small Pinkfoot. Hugh Boyd tells us that a Ross's Goose should appear smaller than that; he was also able to find at least one Lesser Snow Goose in the collection at Slimbridge with a dark blue-grey nail and a little of the same colour on the bill. The possibility of a hybrid Ross's x Lesser Snow Goose, as ADW himself suggested, cannot be ruled out; such birds have certainly been raised in captivity, though only in America so far as is known.

A third bird, or perhaps one of the Solway pair, was seen at Cobbinshaw Reservoir, Lanarkshire and Midlothian, on 17th June 1962 (R. W. J. Smith). It was fairly tame, and provisionally identified as an escaped Ross's Goose, although the observer had not heard of this suggestion in relation to the other birds. The notes on this bird also refer to a very short bill (about half the length from base of bill to back of head), and to a very high forehead. While it did not give the impression of a *very* small goose, it appeared to be rather smaller than a Pinkfoot. Apart from the absence of any goose for a direct comparison of size, the only objection to the identity of this bird is that the bill, though short and stubby, gave an impression of being "stout," which is not the impression that Ross's Goose should convey.

We do not feel confident of giving a specific label to any of these birds, but in view of the problems raised by them we would be glad to have the fullest details of bill shape and colour of any further white geese seen in Scotland.

EDITORS.

WOOD SANDPIPERS BREEDING IN SUTHERLAND

Breeding of the Wood Sandpiper in Sutherland was first recorded in 1959, when an adult was heard mobbing on 18th July and two flying young birds were seen subsequently (*antea* 1: 150). In 1960 in this locality a pair of adults was "chipping" and song flighting on 8th June, and a downy chick two or three days old was found. In 1961 a single adult was flushed from the breeding bog on 26th May, but no further search was made, to avoid disturbing a probably sitting mate; later a juvenile was seen on 14th July. In 1962 both adults were mobbing persistently on 7th June, and generally behaving as if young had hatched. Two days later a single adult was seen by a loch about 12 miles away, but it was not seen again and was evidently not breeding.

On 1st July 1961 IRD was mobbed by a Wood Sandpiper in a marsh near a stream in another locality, but no sandpipers were seen when we both returned on the 8th. In 1962 IDP clearly heard a Wood Sandpiper "chipping" in the same place on 12th June, and IRD was mobbed by a single bird on 1st August. It then spiralled up high, "chipping" continuously, before shooting down, hanging into the wind with wings angled, head raised, and feet slightly lowered. It then flew several times "chipping" at a passing Peregrine, before plummeting into the marsh, where it sat silent on a tree stump for 20 minutes. Fifty yards away a juvenile with down on the nape was located. After allowing approach to within 15 feet it flew unsteadily, revealing incompletely developed primaries. A second juvenile was flushed within a few yards. The comparative lateness of this brood suggests either a replacement clutch or a young pair breeding for the first time.

Ian R. Downhill, Ian D. Pennie.

COLLARED DOVES BREEDING IN LEWIS

On 17th October 1962 I received a summons to the office of the Procurator Fiscal in Stornoway. My anxious fears were allayed when he pointed from the window to a sycamore tree in which there was a nest some 20 feet away. It contained two almost fully fledged Collared Doves. There was no sign of the parents, but the description was sufficient to satisfy me that this was the first nest of the Collared Dove in the Outer Hebrides, and the furthest west so far recorded. I had heard the bird calling from the same neighbourhood a week earlier. Early in November I again visited the area, and found the two young birds perched head to tail in a nearby tree only a foot or two above my head, no more than a little anxious at my proximity. The white and black feathers on the underside of the tail were easily seen, and on one bird the black collar was beginning to show through the juvenile plumage.

Since 2nd June 1960, when I first came across the Collared Dove in Lewis (*antea* 1: 379), its numbers have increased and it has extended its range to include farms on the outskirts of Stornoway, so that breeding was suspected although not hitherto proved.

W. A. J. Cunningham.

TREE SPARROWS BREEDING ON ST KILDA

Tree Sparrows re-established breeding colonies in Shetland and Fair Isle in 1961 (*Fair Isle Bird Observatory Bulletin* 4: 190), and in 1962 they returned to breed again on St Kilda. The last eye-witness account of breeding-stock I can trace is that of the Duchess of Bedford in 1914, although Baxter and Rintoul (*The Birds of Scotland*) describe the Tree Sparrow as common around the houses in 1930. Only a single bird was seen in 1931. The House Sparrow was not responsible for this extinction as it had not then been recorded from St Kilda. Recently migrant parties of Tree Sparrows have been regular in May for at least the past five years.

In 1962 six Tree Sparrows were seen on 28th April, increasing to 16 by the 30th and at least 29 by 5th May. This flock kept together for about two weeks but then gradually broke up, and Tree Sparrows were seen all over the Village Glen. On 27th June three nests were located in holes in the old storehouse; two had eggs and one contained young. On 3rd July another nest, with four eggs, was located. The nests were lined with feathers and Soay wool. The first fledged young were seen on 4th July, so that these birds were breeding about a month earlier than those at Fair Isle in 1961.

Other pairs were suspected of breeding at Geo Mor, along the Lady Grange Wall, an old haunt, and along the old main street, but as on Fair Isle several non-breeders were also suspected. Numbers decreased in late August, and only a few remained when I left on 5th September. There was no evidence of second broods.

The Tree Sparrows seemed to have an adverse effect on the number of Twite. In 1961 about ten pairs of Twite were breeding in Village Glen, and up to a dozen birds were seen in the spring of 1962, but these decreased in early June, after which I could find only one pair that seemed to be breeding. This was near Glacan Conachair, about 400 feet above sea level and well away from the Tree Sparrows. Only occasional Twite were seen elsewhere on Hirta until mid August, when several family parties appeared, perhaps on migration or reared elsewhere in the archipelago. Williamson and Boyd (*St Kilda Summer*) point out that there may be considerable fluctuations in Twite numbers, as with Wheatears and Meadow Pipits; but it is interesting that while the Tree

Sparrows declined on St Kilda in the early years of this century, the Twite probably increased during this period. It may be that these species compete for the same food supply and that St Kilda cannot support large populations of both.

W. E. WATERS.

CURRENT NOTES

(Key to initials of observers : G. H. Acklam, R. W. Adamson, A. F. Airey, A. Anderson, D. G. Andrew, J. M. S. Arnott, W. Austin, J. Ballantyne, D. Banks, Miss P. G. Baxter, J. A. Begg, A. Black, G. W. G. Boag, H. Boase, Miss K. M. Calver, A. Campbell, S. J. Clarke, R. C. Connolly, D. B. Cowie, H. G. Cree, W. A. J. Cunningham, R. H. Dennis, D. Dewar, G. Dick, Sir A. B. Duncan, M. Dunn, Dr G. M. Dunnet, Dr W. J. Eggeling, Sir R. Erskine-Hill, J. Faulkner, H. Ford, M. Forrester, G. H. Forester, K. Goodchild, A. G. Gordon, J. Gunn, I. Henderson, M. J. Henderson, Lt.-Col. W. M. Logan Home, J. A. D. Hope, A. Inglis, Rev. G. T. Jamieson, W. M. Kerr, Miss H. Knight, D. G. Long, Dr A. Lyall, S. J. McCulloch, A. Macdonald (AM), D. Macdonald, Mrs M. K. Macduff-Duncan, G. McKnight, I. Maclean, A. T. Macmillan, Dr P. McMorran, D. K. Mardon, F. Marr, Miss M. M. Mathisen, Professor M. F. M. Meiklejohn, T. D. H. Merrie, A. Munro (AMu), J. Murray, W. Murray, G. L. A. Patrick, Mrs U. Pennell, Dr I. D. Pennie, Major W. B. A. Phillips, J. Potter, C. A. Pountain, A. Pringle, W. Pryde, Mrs I. Rainier, R. M. Ramage, G. A. Richards, W. K. Richmond, E. L. Roberts, Miss M. Ryrie, J. G. Sharp, A. Smith, R. W. J. Smith, Dr T. C. Smout, D. Stalker, D. M. Stark, W. Stein, R. Stokoe, J. H. Swan, Dr A. M. Tait, C. Tait, T. M. Turnbull, L. A. Urquhart, Rev. E. T. Vernon, G. Waterston, Mrs M. I. Waterston, Dr A. Watson, Dr R. S. Weir, T. Weir, J. P. M. Whipp, D. P. Willis, W. Wyper, J. G. Young, B. Zonfrillo.

Unless otherwise stated, January dates refer to 1963 and all others to 1962).

Distribution

This section excludes observations made before 1st July 1962, except in amplification of current information; earlier records are given in another section.

Relatively little is heard now about large numbers of birds killed on misty nights at Scottish lighthouses, and it therefore seems worth recording the death of at least 124—that being the number of corpses found below the light—on the night of 23rd/24th October at the Rhinns of Islay lighthouse. It was very misty, with no wind, and everything dripping wet, and the beams of light pierced the darkness like the lights of a car in fog—typical conditions for a wreck of birds. Over the lighthouse island and adjacent parts of Islay the air was thick with birds, flying about and making a great din, with the beams showing up great numbers of birds as they swept round. Many were clinging to the lighthouse, and the keepers were picking them off the walls. This went on till the light was turned off about an hour after dawn. The birds were mostly **Redwing**, but there were many **Snipe**, and **Water Rail** (1), **Golden Plover**, **Jack Snipe**, **Wren**, **Fieldfare** (1) and **Blackbird** were also noted. Mrs Ord, the wife of the keeper, says that after a hazy night there are usually 10 to 20 dead birds (HK, AMT).

A **Great Crested Grebe** was still on fresh water at Barr Loch, Renfrewshire, on 9th December (GHA, GLAP), and a pair at Gartmorn Dam, Clackmannanshire, until the 16th (GD, JP). Two **Red-necked Grebes** were at Buddon Ness, Angus, on 22nd October (HB), and one at Gullane Point, East Lothian, on 11th November (GHA). A **Slavonian Grebe** was seen as far up the Forth as Longannet, Fife, on 24th and 27th November (GD, JP).

A juvenile **Gannet** was found exhausted with a damaged wing on 3rd October on a lawn at Glenfiddich Lodge, near Dufftown, Banff, after several days of gales. It was photographed for the *Aberdeen Press and Journal*, and returned to the sea by the R.S.P.C.A. (AP). Though the Gannets left the Bass Rock by the end of November, 12 were seen looking rather out of season in snowy conditions on 29th December (FM).

A large flock of 260 **Cormorants** was counted at dawn on 1st December as the birds flew into the Beauly Firth (RHD).

On 2nd November a **Bittern** was identified at Loch Stiapavat, near the Butt of Lewis. Very close views were had, and the lack of a black patch on the neck confirmed that it was not an American Bittern, while the bright green legs ruled out juvenile Night Heron. It was seen again briefly on the 6th (RCC, WAJC, AS).

On 27th October 400 **Shovelers** were counted at Loch Leven, Kinross-shire, very similar numbers to those noted there by Baxter and Rintoul (*The Birds of Scotland*) on the same date 26 years earlier (TCS).

Between 29th September and 14th October a number of **Scaup** were reported from inland waters: in Midlothian two drakes were at Gladhouse on 7th October (RWJS) and one on the 14th (DGA); in Stirlingshire there was a pair on a pool at Skinflats on 14th October (GHA, GLAP); in Lanarkshire a pair was seen at Woodend Loch, near Coatbridge, on 29th September (WS), and three were at Gadloch next day (WW, BZ); in Renfrewshire 12 were counted at Lochgoin on 7th October (LAU); and in Ayrshire two drakes were at the Loch o' the Lowes, New Cumnock, on 3rd October, a pair on a small subsidence loch about half a mile away on the 13th (JAB), and six at Camphill Reservoir, near Dalry, on the 12th (RMR). *The Birds of Scotland* gives no breeding record of **Pochard** in Lanarkshire. At Gadloch for the second year in succession small numbers summered; twenty-nine were counted on 22nd July, but nearly all were drakes, moulting there with the Tufted Ducks (WW, BZ). In Caithness a large assembly of about 500 birds was counted at St John's Loch on 14th October (DMS).

Two **Long-tailed Ducks** were at the Heads of Ayr on 22nd November (GAR), and one as far up the Forth as Longannet on 11th and 27th November, and on 1st December (GD, JP), in both of which localities it is a scarce bird. Inland, a drake was on Balgavie Loch, Angus, on 13th November (HB). On 28th November, at Prestwick sewer outlet a duck and three drake **Velvet Scoters** were seen (GAR); this is another species which is very much scarcer in the west than on the east coast. Large numbers of sawbills were feeding on the herrings in the Beauly Firth on 26th November, and counts of **Red-breasted Mergansers** and **Goosanders** gave totals of 630+ and 410 respectively (RHD). A red-head **Smew** was at Loch Flemington, Inverness-shire, on 21st November and 3rd December (RHD); two were on a pond at the mouth of the River Endrick on 16th December (HGC, SJM), and one near Libberton, Lanarkshire, the same day (RE-H).

Two **Shelduck** were noted inland on Milton Loch, Crocketford, Kirkcudbrightshire, on 16th December (AFA), and one on the ice at Gladhouse, Midlothian, on the 23rd (RWJS).

A strong-flying **Grey Lag Goose** seen at various places in Fleet Bay and Wigtown Bay between 26th and 31st August had apparently summered in the area (JPMW). Thirteen Greylags seen flying in over the north coast of Sutherland on 3rd October were evidently newly arrived migrants as they settled on a small lochan and were reluctant to rise even when approached (ETV).

Hundreds of unidentified geese were passing over all parts of Caithness on 7th October, and large numbers over Thurso after dark on the 23rd (per DMS). Some interesting notes on the arrival of Greylags were made during a visit to eastern Scotland from 20th to 26th October; in Morayshire 30 were seen at the Findhorn estuary on the 23rd, and 30 flying south next day in the same area; on the 25th six small flocks were seen at intervals throughout the day flying high to the south over the Spey Valley/Cairngorms, one party of 17 flying low over Loch Garten, another of seven birds flying over the summit of Cairngorm at about 5,000 feet, and the last party of 51 coming in to Loch Insh at 5.30 p.m. BST. Earlier, in Angus, 100 were already present in a flooded bog near Kirkton of Kingoldrum and 800 at Lintrathen on the 21st (RS).

A Greenland **White-fronted Goose** was with large numbers of Greylag and Pinkfeet in the Carsebreck district of Perthshire on 28th October (AI, TDHM). Two white geese were seen next day with Greylags in the same area, but as the colour of the wing tips could not be seen their identity must remain in doubt (GTJ).

A Dark-breasted **Brent Goose** was also present with Greylags and Pinkfeet at Carsebreck on 28th October (AI, TDHM). On 10th November the remains of a Dark-breasted Brent, which had been dead perhaps a week, were found at Tyninghame, East Lothian (AM), and the following day 13 Pale-breasted Brents circled over the mudflats at Aberlady but did not land (WP); a single Pale-breasted Brent was seen at Tyninghame on 18th November and on 13th January, the remains of the Dark-breasted bird being inspected again on the former date (RWJS). Twenty **Barnacle Geese** were seen at Noss Head, Caithness, on 12th October (DMS), one with Greylags at Carsebreck on 28th October (JMSA, MFMM), and four near Morton Lochs, Fife, on 9th December (CT).

The two immature **Whooper Swans** reported at Loch Ken, Kirkcudbrightshire, on 2nd June (*antea* 2: 204) definitely remained throughout the summer (JGY); one at the Loch o' the Lowes, New Cumnock, Ayrshire, on 5th September may also have summered (see *antea* 2: 204) (JAB). On 27th October at Loch Leven, Kinross-shire, 230 were counted, and there were a further 50 on stubble near Kinross (TCS); on 1st December no fewer than 180 were feeding close together on an area of less than five acres of stubble about a mile north of Milnathort, Kinross-shire (AW).

Autumn records of **Buzzards** from Forth and Tweed are of one at Hule Moss, Berwickshire, on 19th October (SJC) and again on 4th November (DGL), two at Gartmorn Dam, Clackmannanshire, on 20th October (GD, JP), one on the Midlothian/Peeblesshire boundary just north of Carlops the same day (WMK), and one at Tulliallan, Fife, on 3rd November (GD, JP).

About 19th November an **Osprey** was seen to plunge into the Ettrick Water, Selkirkshire, and carry off a fish in its talons. This is a late date for an Osprey to be in Scotland (Commander Napier per WMLH).

Some autumn and early winter records of **Merlins** include single birds at Gladhouse, Midlothian, on 20th October (DGA) and 4th November (RWJS); at Hule Moss on 23rd September, 4th and 11th November (SJC, DGL), near Coldingham on 21st October (MFMM), and harassing a flock of Snow Buntings near Abbey St Bathans on 25th November (SJC, MJH, WM), all three places in Berwickshire; a female in New Cumnock, Ayrshire, on 14th October (JAB); and one on 14th October and 18th November at Skinflats, Stirlingshire, where the number of kills seen in past years suggest that this may be a favourite winter hunting ground (GD, JP).

A Greyhen was shot on 1st December amongst Partridges at

Eweford, near Dunbar, East Lothian; no **Black Grouse** has been known there before (IH per AM). An interesting assembly of game birds was encountered on 27th October on Sheriffmuir, Perthshire, when about six Blackcock, a few Greyhens, along with both **Partridges** and **Red Grouse**, flew across the road from a field where a cock **Pheasant** had just been seen (WAJC, ATM, MFMM). A hen **Capercaillie** was seen at Tulliallan, Fife, on 3rd November: the observers suggest that it could have come from the nearby Devilla Forest (GD, JP).

In many places the status of the **Water Rail** is obscure, and it is often impossible to be sure whether individual records refer to resident, migrant or wintering birds. At Noss Head, Caithness, one was found dead on 12th October (DMS), and the species was noted among other migrants at the Rhinns of Islay lighthouse on the night of 23rd/24th October (HK, AMT); single birds were recorded at the Buddon Burn, Angus, on 22nd October (HB), at Loch Ard, Perthshire, on 30th November (ETV), at the Marl Loch at Aberlady on 21st December (JADH), between Walkerburn and Innerleithen, Peeblesshire, on 25th November (JB); at Bell's Burn, Manderston, Berwickshire, on 18th and 25th November (SJC); and one was caught sheltering in a doorway from the cold NE wind on 10th November at a farm near Garvald, East Lothian. This last bird may well have been a migrant, because three had been on the Isle of May on the 7th (AM).

Unusually large numbers of **Lapwings** built up during the last week of September in coastal stubble fields between Girvan and Turnberry, Ayrshire, and a count along the eight miles of road, made twice from a car, and covering a strip perhaps 250 yards wide, gave a total of between 19,000 and 21,000 Lapwings, as well as 500 **Golden Plover** (WP). Throughout October and November observers reported exceptional numbers of Golden Plover in Ayrshire—not only at their usual haunts such as Bogside racecourse and the Barassie shore at Troon, where there were 500 on 15th October, but also with flocks of Lapwings (RMR, GAR). Large numbers were seen at Loch Leven, Kinross-shire, on 27th October, and one field there must have held several hundred, spread out all over the stubble (ATM).

High counts of **Snipe** include 40 at Headshaw Loch, Selkirkshire, on 14th October (JB); and in colder weather three birds shot from a flock of 30 at Pencaitland, East Lothian, on 29th December proved to be Snipe (per AM), while near Glenluce, Wigtownshire, about this time 15 and 11 were flushed from two ditches, where the hard weather had evidently concentrated then on the running water (JM). Further **Black-tailed Godwits** (see *antea* 2: 256), all single birds, are reported from Kingoodie, Perthshire, on 8th November (HB), the Almond estuary, Mid and West Lothian, on 13th October (TCS), and

Southerness, Kirkcudbrightshire, on 25th August (ELR). In Dumfriesshire, single **Green Sandpipers** were at Caerlaverock on 4th and 13th September, and from the 30th to 7th October (ELR), and one landed on a dry-stane dyke on Rivox Moor, three miles NW of Beattock, on 6th October (RWA). A late **Common Sandpiper** was at Higgins Neuck, Stirlingshire, at the south end of the Kincardine Bridge, on 13th October (GD, JP).

On 5th November five **Redshanks** were found drowned in stake-nets at Glencaple, Dumfriesshire, by R. Wilson. One had been ringed in Iceland. The birds were examined the same day and all looked darker on the back and wings than most British Redshanks, though the plumage details were indistinct because of the birds' sodden condition. The breasts of four of them looked very dark, and there was noticeably heavy spotting on the underparts. The wing measurement of the ringed bird was 168 mm, and the others measured 164, 165, 173 and 173 mm. Only the two smallest are within the limits of the British race, as given in *The Handbook*, and it seems likely that all belonged to the Icelandic race, which, though no doubt common enough, has not previously been recorded in Dumfriesshire (ELR). **Spotted Redshanks**, as elsewhere (see *antea* 2: 257), were unusually common during the autumn at Caerlaverock, being noted during August on 13th (1), 19th (1) and 30th (4), September on 25th (2) and 30th (1), and October from 1st to 20th (5) (ELR). Other reports are of two at Lentran, Inverness, on 12th November (RHD), two at Merryton, near Hamilton, Lanarkshire, on 15th October (GHA), and one there on the 20th (LAU), and of one on the shore at Fairlie, Ayrshire, from 11th until at least 26th December (ETV). The first **Greenshank** arrived at Caerlaverock on 2nd August, and numbers increased steadily to over 30 in early September, and more slowly to over 50 by the first week of October, thereafter declining until only a few remained on 6th November (ELR). One was seen at Inverness on 22nd November (RHD).

A **Little Stint**, an uncommon bird in Solway, was at Caerlaverock on 1st October (ELR), and in addition to the few already recorded (*antea* 2: 258) there were four at Tyninghame, East Lothian, on 30th September, five on 6th October, and two on the 14th (RWJS), and single birds at Cult Ness, Fife, on 2nd October and at Skinflats on the 6th (GD, JP). Full details have been received of a **Pectoral Sandpiper** discovered at Merryton Farm, by the Clyde near Hamilton, Lanarkshire, on 18th October, and seen by a host of bird-watchers on the 19th, 20th and 21st (GHA, JMSA, AGG, MFMM, TDHM, GLAP, WKR, LAU). There is no previous record for Lanarkshire. A few more **Curlew Sandpipers** are reported (see *antea* 2: 258): one at Montrose, Angus, on 22nd October (RS), one at Kingoodie, Perthshire, on 14th November (HB), one at Longannet, Fife, on 29th September, and two at Skinflats on 6th and 13th October (GD, JP).

Further reports (see *antea* 2: 258) of **Ruff** have been sent to us, and these are noted for completeness: one was at Hilda Marshes, in Glasgow, on 25th July (WW), four were at Skinflats, Stirlingshire, on 6th October (GD, JP), and two at the Low Parks, Hamilton, on 14th October (GHA); at Caerlaverock Ruffs were commoner than usual, with three arriving on 11th August, 1's and 2's present until 1st October, and four on the 7th (ELR), and a single bird on 28th December (WA, ELR, JHS); there is also a winter record of one from 29th December until at least 3rd January on the shore at Prestwick, Ayrshire (GM, RMR, GAR). A **Grey Phalarope** appeared at Kingoodie, Perthshire, on 4th October, and the observer has sent a description of the bird (HB).

A large gathering of some 360 **Greater Black-backed Gulls**, mainly adults, was seen at dusk in the Findhorn estuary, Morayshire, on 23rd October (RS), while inland there were 85 at St Mary's Loch, Selkirkshire, on 16th December (JB). **Lesser Black-backed Gulls** winter regularly in very small numbers at Dumfries, but the 1959-60 investigation into the winter status of this species produced no other reports for Solway (*Bird Study* 8: 127). It therefore seems worth recording one at Kippford, Kirkcudbrightshire, on 3rd December, two there on 2nd January (AFA), and one at Marine Lake, Stranraer, Wigtownshire, also on 2nd January (JM); one with bright yellow legs and showing clearly the black mantle of the Scandinavian race was seen feeding on a white hare at the summit of the Dalveen Pass, Dumfriesshire, on 16th January (ABD). A **Glaucous Gull** in Aberdeenshire on 4th November was flying south along the coast two miles north of the mouth of the Don (DKM). A count of **Little Gulls** at the Buddon Burn, Angus, on 22nd October gave a total of 21 (HB); an immature was at the Doonfoot, Ayr, on 14th October (WA, RMR), and an adult was feeding with Black-headed Gulls at Browhouses, near Gretna, Dumfriesshire, on 29th September (WBAP); in East Lothian an adult was seen flying up the Forth at Eyebroughty on 3rd January (RWJS). Up to 200 or more **Kittiwakes**, nearly all adults, were feeding on the Kessock herring shoals in the Beauly Firth throughout November—large numbers to be inshore at that date (RHD). A number of **Black Terns** have already been noted (*antea* 2: 259), including two on 16th August and two on the 18th; a further record for the 18th is of one at Skinflats, Stirlingshire, where it was being harried by "Comic" Terns as it sat on a post (KMC, MMM). In the Forth the main exodus of **Common/Arctic Terns** from the Almond estuary took place between 30th September and 5th October, only one remaining on the latter date, although at Fidra a dozen each of Common and **Sandwich Terns** were present on the 7th (TCS).

The population of **Puffins** on Ailsa Craig is evidently at a very low level; only one was seen on 28th July, and visits in 1960 and 1961 revealed two and none respectively; the boatman never sees more than six at a time. From possibly a quarter of a million birds in the 1860's (*Scot. Nat.* 1951: 99), numbers fell to 30 pairs in 1947, but had recovered to 300 pairs by 1953 (*The Birds of Scotland*) (BZ).

Collared Doves continue to increase in the areas where they are established; at Cluny, Forres, Morayshire, up to 35 old and young birds could be seen during the autumn (DBC); in Edinburgh one was seen near the west gate of the Royal Botanic Garden in August (JHS), and up to 12 at Edmonstone during November (GWGB, AC, MD); local information is that in East Lothian there are "masses" of Collared Doves on the Dunglass estate near Cockburnspath, and also in Berwickshire at Lennel, near Coldstream, but we have no exact details (MFMM). The few notes of **Barn Owls** which we have received confirm that the Solway area is the most likely place to see them; outside that area one was seen hunting near Gavinton, Duns, Berwickshire, on 21st and 28th December (DGL). On 4th November six **Short-eared Owls** were seen at Wick, Caithness (DB).

A party of 20 **Swifts** was seen flying south over the cliffs at Dunnet Head, Caithness, on 1st October; this is very late for such a party so far north, and the birds were probably drift migrants brought there by the stiff SE breeze (ETV).

A **Kingfisher** was found entangled in netting in a garden at Laxford Bridge on 24th September. It was sent to Golspie, where it was put in a cage and forcibly fed with slips of raw salmon. Although it had a broken wing it settled down and appeared well, regularly casting up pellets of salmon scales; but on the 28th it died suddenly. Post mortem examination revealed that it was a female, weight 40.7 grams. There is no previous published record of a Kingfisher in West Sutherland, although there is a local report of one on the River Inver in May or June 1929, and an ancient specimen in the Tongue Hotel is said to have been shot on the Borgie River (IDP).

The **Green Woodpeckers** reported in the last issue (*antea* 2: 261) are not the first to be recorded in Kirkcudbrightshire, as we have already claimed this distinction for a rather similar note in an earlier issue (*antea* 2: 43). Another record for the county is of one at Kippford on 17th December (AFA). At North Berwick, East Lothian, adults have been seen with fledged young on the landward side of the Law in 1954, 1955, 1956, and again in 1962 (HGC). One heard but not seen at the Lake of Menteith on 2nd December is apparently the first to be recorded in South Perthshire, although there are a number of records for the northern portion of the county (MF, DS).

Exceptional numbers of migrant **Great Spotted Woodpeckers** were reported on the east coast of Scotland from 8th October, and during the following weeks. The records which we have received probably do not give anything like a full picture, as we have heard many expressions of surprise at the numbers present in various localities. In Caithness the first birds were seen on 8th or 9th October in Wick (PM), and there were 12 there on the 13th, eight on the 14th, one on 7th November and one on the 11th (DB, JF, JG, PM); scattered reports from elsewhere in the county included two on the heather at Ousdale about 11th October (per IDP), one at Westfield on the 12th (JG), and one in Thurso on 12th and 13th November (MR). In Sutherland one was picked up dead in Brora on 13th October; it was an immature bird, very dark in colour, with dingy grey underparts, massive beak, wing measurement of 144 mm, and weighing 96.3 grams; dissection showed that it was a female, and the stomach was crammed full with the bodies of aphids and a felted mass of their legs and antennae. On 21st October another immature, with red top-knot, dingy underparts, and heavy black bill, was seen in a small sycamore wood at Portgower; it was astonishingly tame, and fed in a curious manner, picking insects off the leaves and twigs and hanging like a huge tit. On 5th November a very tame woodpecker was seen in the garden at the Altnaharra Hotel, also feeding like a tit and clinging to the outer branches of a tree. Another large dark woodpecker appeared in Golspie on 25th and 26th November. All these birds were obviously of the northern race *D. m. major* (IDP). In Inverness-shire one was seen flying south over the mudflats at Lentran on 30th November (RHD). In Aberdeenshire two were in Newburgh on 13th October, and one on 4th November, and others of which we have not had details were also there (GMD); one was seen near the Loch of Strathbeg on 2nd November (RHD). The same immigration may have been responsible for the sighting of one at Bruichladdich on 22nd October, and one at Portnahaven on the 24th, both on Islay (per HK & AMT), and one in Stornoway Woods, Lewis, on 17th November (WAJC, IM). The species is not often recorded from these islands.

Large flocks of **Skylarks** reported in Kirkcudbrightshire were of 300 birds moving west at Loch Rutton on 12th October, and 400 feeding on stubble near Castle Douglas on 29th December (AFA). A **Shore Lark** was seen on 14th October alighting briefly on the esplanade wall between Granton and Silverknowes in Edinburgh before flying inland (CAP); another was feeding on the verges of the road near Cellardyke bathing pool in Fife on 1st January (WJE, GW, MIW).

Swallows were seen at a number of places in November:

2 Nov—one, Invergowrie, Perth (HB).
3 Nov—last seen, Sanquhar, Dumfries (AB, JGY).
13 Nov—one, Ingliston, Midlothian (HGC).
14 Nov—one, Lundin Links, Fife (PGB).
16 Nov—one in obvious distress in sleety weather, Valleyfield Colliery, Fife (GD, JP)

Three **Ravens** were about Gartocharn, Dunbartonshire, for several days from 17th November; they are most unusual there (TW). A **Magpie** was seen on 7th October near Cockburnspath, an area where the species is very scarce; one was reported there two months before (*antea* 2: 261) (DGL). No fewer than twelve were counted in a group on oat stubble near Dunfermline, Fife, on 14th November—four of them on a single sheep's back (GD, JP).

We have had many comments on the arrival of **Fieldfare** and **Redwing**, and the records seem worth giving in sequence as they create an interesting picture:

28 Sept—3 Redwing in evening, Strathy Point, Sutherland (ETV).
3 Oct—40+ Redwing and 15 Fieldfare passed through, a few remaining, Tore, Black Isle, E. Ross (MKM-D).
6 Oct—150 Fieldfare on Beauly-Drumnadrochit road, Inverness, in afternoon (ETV); first 30 Redwing heading SW at Manderston, Berwick (SJC), and another 12 there (DGL).
7 Oct—Lots of Fieldfare and Redwing, with a preponderance of the latter, flying high over Glen Lyon, Perth, coming from the west end of the glen (TW); one Redwing at Gladhouse, Midlothian (RWJS).
8 Oct—first Redwing at Georgemas, Caithness (DMS).
10 Oct—first Redwing heard at night over Edinburgh (and again on 11th, 13th and lots on 17th) (TCS).
11 Oct—one Fieldfare, Easthaven, Angus (HB); hundreds of both species at Fife Ness with other migrants (PGB).
12 Oct—50 Redwing near Dalry, Ayr (RMR); the Mound, between Innerleithen and Walkerburn, Peebles, thick with birds in the morning, with over 500 Redwing, most of which moved off east down the valley (JB).
13 Oct—first Fieldfare, Manderston, Berwick (DGL).
14 Oct—50 Fieldfare and 10 Redwing at Gladhouse, and others heard passing overhead in low cloud (DGA).
18 Oct—first Redwing and Fieldfare seen in cleughs of Lammermuirs; not noted in lower areas of East Lothian until November (AM).
19 Oct—movement of Fieldfare at Hilda Marshes in Glasgow, with at least 500 gathering in fields and moving W and SW (WW, BZ).
21 Oct—50 Fieldfare, Southerness, and 300 at Carsethorn Bay, both Kirkcudbright (AFA).
26 Oct—first 20 Redwing, Kippford, Kirkcudbright (AFA).
27 Oct—flocks of Fieldfare present in the fields at many places between Dunblane, Perth, and L. Leven, Kinross (ATM).
2 Nov—200 Fieldfare in hedges, Flotterstone, Midlothian (DD).
8 Nov—"There has been an unprecedented number of Fieldfares about the island (Lewis) during the past week or so" (WAJC).
11 Nov—strong easterly winds brought thousands of Redwing, Fieldfare, and Blackbirds, and smaller numbers of other birds, to Wick, Caithness (DB).
15 Nov—the Thurso area, Caithness, seemed alive with large flocks of

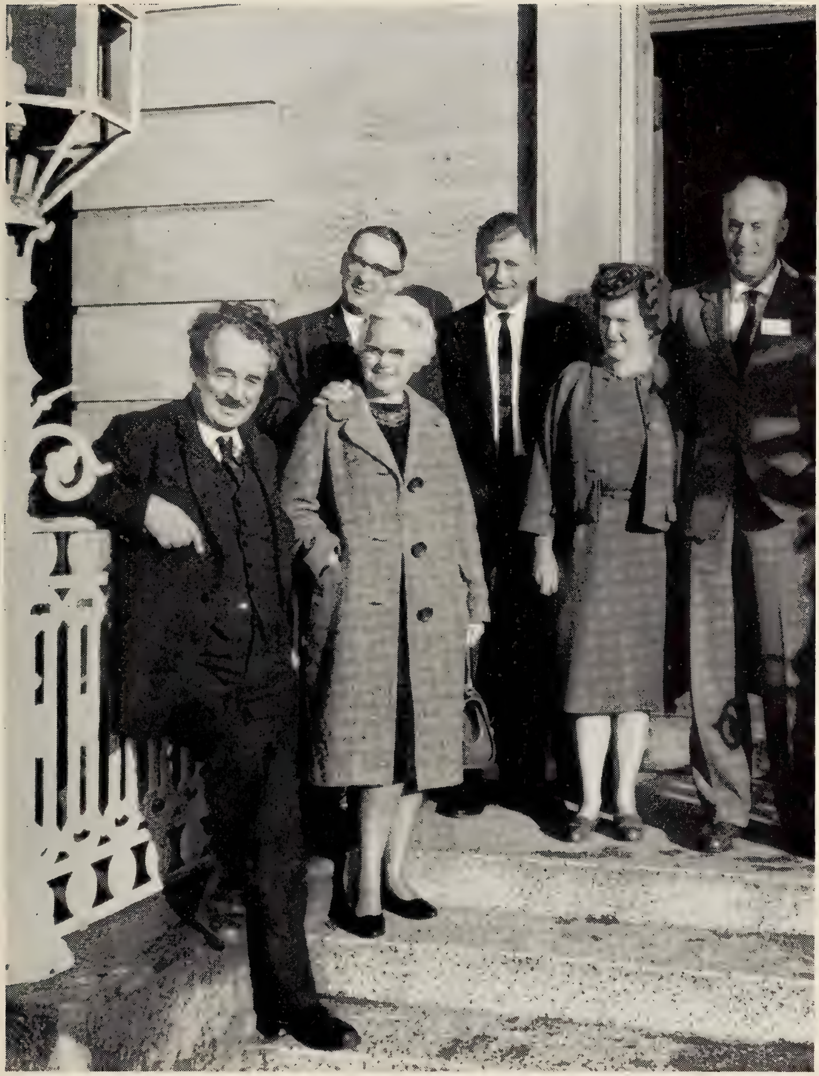

Plate 16. Personalities of the S.O.C. Conference at Dunblane, 26th to 28th October 1962. *Left to right*: Professor M. F. M. Meiklejohn, President of the S.O.C.; Professor and Mrs K. H. Voous, Amsterdam; Heinz Sielmann, Munich; Mrs and Dr Robert Carrick, Canberra (see page 301).

From a colour transparency by C. E. Palmar.

Redwing and Fieldfare "this last week" (PM).
27 Dec—1,500 Redwing and Fieldfare, in about equal numbers, were seen on a bicycle ride within five miles radius of Prestwick—the most the observer ever saw (RMR).

Three **Song Thrushes** seen on 17th November near Hunterston, Ayrshire, were so dark on the upper parts that they might at first sight have been taken for Redwing; the spotting on the breast was conspicuously dark and vivid. These birds were markedly darker than the darkish variety of the west mainland with which the observer is familiar; they were completely by themselves feeding on pasture near the shore. In 50 years of bird-watching he had never seen such dark vivid thrushes, and he had no doubt that they were of the Hebridean race, which has seldom been recorded on the mainland of Scotland (ETV). With three such birds there is less chance of confusion with abnormally plumaged birds of the local race, but some authorities have doubted whether the Hebridean race can be safely identified in the field away from its breeding haunts.

Late **Wheatears** are reported from three localities: at Peterhead, Aberdeenshire, one was on the beach on 24th November (DPW); in Fife one was seen by the road from Cupar to Lundin Links on 11th November (PGB); and on the shore at the Doonfoot, Ayr, one was seen on 5th November (WA), and again on the 25th, and on 9th December, but not on the 16th nor on 2nd January (GHA, GLAP).

Records of **Blackcaps** in late October may well refer to birds still on passage, and the same might apply to two at Wick, Caithness, on 4th November (DB), and one there on the 11th (KG, PM, DMS). Winter records are of a cock seen at a bird tray at Rothes, Morayshire, on 14th December, a hen at a nut basket at the same place on the 24th, both birds being still there on 3rd January (AP), and a cock at Haddington on 5th January (AM).

A leaf-warbler was seen on 2nd December feeding in birches by Spynie Loch near Elgin, Morayshire; it was very approachable and was seen to have distinctly pale legs, so that it is almost certain it was a **Willow Warbler**, an unlikely bird at that time of year. Though it seemed to be in good condition its presence could have been the result of a defective left wing which, though it did not stop it flying, may have prevented it from migrating (JB). At Fife Ness a late **Chiffchaff** was seen on 14th October, and there were two on the 22nd, the birds being identified on the basis of their dark legs (RSW). On the 25th a leaf-warbler, presumably a Chiffchaff although the legs were not seen, was noted in the north of Ayrshire near Skelmorlie (AL); and on 22nd November another, with dark legs, was at Invergowrie, Perthshire (HB).

There was a **Red-breasted Flycatcher** at Fife Ness on 11th October (PGB).

A few **Waxwings** were reported in the middle of November, and there is some suggestion of another group of records at the end of the year; these will appear in the next issue of *Scottish Birds*. On Sunday 11th November strong east winds brought two Waxwings to Wick, Caithness (DB), and one was found moribund at North Berwick, East Lothian (AM). On the same day large numbers—said to be over 300—were feeding on berries along the banks of the Caledonian Canal at Inverness (AMu per UP), and 150, which were gone next day, were feeding on cotoneaster at Fort Augustus, Inverness-shire (*Inverness Courier* 20th November). In view of the small number of other records these large flocks may perhaps be thought surprising, and these are second-hand records; but people in these areas are familiar with Waxwings, and evidence for movement of this kind down the Caledonian Canal has been noted more than once before (*e.g. antea* 1: 243). On the 13th four were found feeding on hawthorn in Stornoway, Lewis, and they remained for a few days (WAJC), and on the 17th one was at Thurso, Caithness (MR).

A **Great Grey Shrike** was seen at Fife Ness with other migrants on 10th November (WJE); one was sitting on telephone wires at Loch Insh, Inverness-shire, on the 14th (RHD); one was at the mouth of the Endrick, Dunbartonshire/Stirlingshire, on the 25th (MF, DS); and on 18th December near Lamlash, Arran, one was perched on telephone wires in the middle of a flock of Yellowhammers which seemed oblivious to its presence although it appeared to be taking a full interest in its surroundings (JGS). An immature **Red-backed Shrike** was seen in a thorn hedge at Halkirk, Caithness, on 24th September (PM).

Two **Goldfinches** turned up at Dornoch, Sutherland, on 1st January, about the same time as they were seen last winter (*antea* 2: 54, 214) (DM). Flocks worth mentioning are of 15 birds at Hilda Marshes, Glasgow, on 11th November (WW, BZ), 40 between Walkerburn and Innerleithen, Peeblesshire, on 12th October (JB), and 20 in Solway—where the species is perhaps less noteworthy—at Bridge of Dee, Kirkcudbrightshire, on 21st November (AFA). Migrant **Siskins** were noted in Caithness on 30th September at Wick (10) and Noss Head (6), and on 14th October there were eight at Wick (DB, JF, JG); two were at Fife Ness on 11th October (PGB), and 11 in birch scrub at Longannet, Fife, on 24th September (GD, JP). At Roybridge, Inverness-shire, there were over 100 on 19th September (RHD). Flocks of **Linnets** were flying in over the north coast of Sutherland each afternoon from 28th September to 3rd October; 135 were counted resting on wires at Melvich at 4 p.m. on the 28th; 164 resting and preening on wires at Bettyhill at 5 p.m. on the 3rd; and smaller numbers on other dates. There were strong east winds throughout the period (ETV). Passage of Linnets and **Twite**, along with other species, was noted in Caithness at Noss Head on 12th October, and at Thurso on the 16th (DMS). At Skinflats, Stirlingshire, 60 Twite were present on 18th November, and 80 on 16th December (GD, JP). At Roybridge, Inverness-shire, 300 **Redpolls** were counted on 19th September in the same area as the Siskins (RHD). Records of **Crossbills** are still coming in, but any not yet reported should be sent to George Waterston now for the summary which he is preparing.

A **Lapland Bunting** was seen at the Loch of Wester, Caithness, on 11th November, the day on which the first Waxwings were reported (PM, DMS). There were up to 26 **Snow Buntings** at Longannet in the second half of November, 62 at Peppermill Dam on the 27th, and 15 at Loch Gelly on 17th December; the observers report that the species is normally scarce in the western parts of Fife (GD, JP). At Swanston, Edinburgh, a flock of over 200 on 24th December was larger than the usual winter population there (HF).

Between 20 and 30 **Tree Sparrows**, with a large flock of Yellowhammers in a thick sallow bush on arable land, in North Knapdale, Argyll, are the first the observer has seen there in seven years in the area (IR).

Earlier observations—before 1st July 1962

At Gadloch there were nine adult **Great Crested Grebes** on 1st May; three nests were found but no young were reared; in 1960 two pairs reared three chicks, and in 1961 three pairs reared only one. *The Birds of Scotland* suggests that breeding Great Crested Grebes are not very numerous in Lanarkshire (WW, BZ).

A "blue" **Fulmar** was seen on 22nd May at the bothy on Eynhallow, Orkney, with other Fulmars which were evidently prospecting there (GMD).

Grey Lag Geese flying south at Easthaven were noted in a previous issue because of the lack of records of coasting geese in Angus (*antea* 2: 47). On 11th October 1961 a great arrival of **Pink-footed Geese** was observed in the area, with an estimated 10,000 of them during the afternoon and evening flying southward and settling at Tentsmuir, Fife. It is most interesting to note that comparable numbers, and probably many of the same birds, took part in a great influx to the Lothians on the following three days (*antea* 1:500). The movement was first seen at Broughty Ferry, where many flocks of 10 to 300 birds were passing, and was so impressive that the observer drove to Arbroath to watch from the cliffs. There was a strong SW wind and the geese migrating over the sea kept very low over the water, except that every half minute or so they would rise in a wave from front to back of the skein to 20 or 30 feet for five seconds, as if struck by a gust of wind; they were clearly making as much use as possible of the "boundary layer" of air. Except when they rose up momentarily they would probably be invisible on a radar screen, and they could be easily missed from the land unless one looked out to sea with binoculars. Several skeins passing over the land flew at 500 to 1,000 feet in contrast to those flying low over the sea. Later, from Broughty Ferry, Tentsmuir Point could be seen black with newly arrived geese, many of which had obviously arrived out of sight, perhaps beyond the range, of the observer (GHF).

A **Greater Black-backed Gull** was found incubating three eggs on 12th June on top of a stack between Collieston and Whinnyfold; there is no previous record of breeding in Dee or Aberdeenshire (AA, GMD).

A single **Redwing** was skulking in a berberis bush at Newburgh, Aberdeenshire, on 10th June; it appeared to be in good health, and was very approachable, but it was not seen again (GMD).

General observations on behaviour etc.

Prey at a **Buzzard's** nest in Upper Nithsdale which contained a single chick included two freshly dead Tree Pipits found there on a visit during the summer (JGY).

A Woodpigeon clattering out of the branches of an elm near Stirling in November disturbed a bat, which was seen fluttering around aimlessly. A **Peregrine** flew over, turned, and circled the bat: for a moment it poised, and then continued on its way without attacking. One wonders whether this reflects the opinion of Peregrines as to the palatability of bats (TMT).

In the last number of *Scottish Birds* we asked for observations on the suggestion that there had been more waders than usual retaining their summer plumage during autumn 1962 (*antea* 2: 265). AFA has kindly drawn our attention to a paper on "Radioactive contamination in birds" by J. M. & J. G. Harrison (*The twelfth Annual Report of the Wildfowl Trust 1959-1960,* p. 151). The authors discuss possible relationships between radioactive contamination and assumption of breeding plumage out of season. There is food for thought, but we doubt if this is what was noted in Scotland, and we are not convinced that in general 1962 was exceptional in the number of waders seen in summer plumage beyond the usual dates, though there may have been some local variation.

REVIEWS

Animal Dispersion in relation to Social Behaviour. By V. C. Wynne-Edwards. Edinburgh and London, Oliver & Boyd, 1962. Pp. 653; 11 plates (4 in colour); 50 text-figures. 55/-.

A quick flip through the pages of this book reveals the prodigious amount of factual information, the width of the field from which observations are cited, and the synthesising ability of the author in tying all these together. Only careful reading does it justice. Another obvious remark is that as a reference book alone, it is valuable, assembling under the general theme of "mechanisms regulating animal numbers through social interaction of one sort and another," a mass of information which would be hard to dig out and even harder to pigeon-hole as useful. One could, if permitted, browse happily along simply enjoying the information without worrying overmuch about its significance. Indeed one gets the impression that quite a lot of the evidence was gathered by the original observer without much idea about its possible significance. As a result, much of it will bear more than one interpretation, and one criticism must be that there is *no* critically planned work to sustain the radical theme. Nevertheless, omitting all the evidence that could be regarded as special pleading, there still remains a lot that is not. Indeed, one of the nicest things about the book is that it provides, for the first time, possible explanations for a whole range of common phenomena.

Can one say simply why this is a controversial book? Its avowed fundamental aim (p. 189) is to demonstrate that "in order to exploit the habitat to the full and yet continue to thrive, the consumers themselves must impose a limit on the demands they make on the resources." The author agrees with Dr David Lack's view that food is the ultimate factor controlling the evolution of reproductive rates, and indeed acknowledges that his own book stems from Dr Lack's work. He disagrees in the manner of the control, and proposes conservationism through conventional competition (in many forms) to prevent over-exploitation of the resources. If it is accepted in principle that, man apart, undisturbed animals do not over-exploit the habitat's resources (and this, though not axiomatic, seems likely), then this means a suitable dispersion, and in turn leads to what seem to me two main aspects of the book.

One theme, convincingly pursued, concerns the social phenomena by which animals receive information about the density of their own species, as a result of which the homeostatic machinery controlling recruitment rate *could* be briefed. Population homeostasis is analagous to physiological homeostasis in an individual, by which it maintains the correct state despite a changeable environment. The corollary, by which, within limits, animals regulate their numbers by "intrinsic" means (*e.g.* social phenomena) for optimum exploitation of the habitat, is the controversial issue. From the book one visualises, perhaps wrongly, individuals standing back, having a good look at the environment and themselves, perhaps extrapolating the present situation forwards to the breeding time, and then, in the face of complex seasonal and cyclic phenomena, performing an elaborate computation to decide what the breeding effort shall be! As the author points out in his discussion of epideictic phenomena, an expression he uses to cover a category of communal displays, one important function of which seems to be to present an index of the organism's density (as, for instance, in the milling of midges, chorus of frogs, wader flocks, communal roosting, communal hibernation, dawn song, swarming, etc.), the same underlying characteristics can often be detected. But why, since individual survival is often thereby prejudiced, do they do it? Here is suggested a *possible* function of sufficient importance. One reason for the very long section on the methods of communication in animals lies in the importance of their relationship to the density-dependent stresses which can result from them. Frequently, here, the combination of first-rate naturalist, trained zoologist and lucid writer enables the author to communicate his insight with rare skill. One appreciates his claim that the theory seemed to give him a unique vantage-point from which to view natural phenomena, though other people may be unable to share this. A tighter style would have saved much valuable space in this long section, as elsewhere, but leisurely prose helps slow thinkers, like the reviewer. The chapter summaries are a great help to the reader in a hurry.

The other theme leads to the subject of the evolution of the necessary group-phenomena associated with the theory, and I feel much less happy about this. Group evolution, as for instance it occurs in the social Hymenoptera, is, as Wynne-Edwards points out, no new idea. But group-selection, as he develops the idea, will surely be a stumbling block to many. It is not hard to accept that, as things are, the fate of the individual (or pair if you prefer the breeding unit) is bound up with the fate of the group. If the group fails, it fails. Once group-selection mechanisms exist, I can see that any individual that fails to compete for some "conventional" reward, such as a territory, may generally be unable to breed, but *is* a territory a "conventional" reward (it may have a very real function as such), and how did such competition originate? Again, individuals gaining some breeding advantage over the group (*e.g.* Gannets), by laying two eggs instead of one, would in theory benefit from the abstinence of the rest of the group, who would simultaneously penalise themselves by laying only one. Yet Gannets do not lay two eggs, even though I have shown that they *can* rear two chicks. It could be that ordinary selection pressure, working in critical years against such offspring, is enough to make the habit disadvantageous. Assuming for the sake of discussion that such chicks survived as well as single ones, would we find that such a trait, spreading throughout the local group, eventually led to over-exploitation and hence to the dying out of the group? It is a pity that the large-scale field experiments which could answer such questions are completely impracticable, at least with the higher vertebrates. In this context, however, the author's remarks on the discreteness of local groups make interesting reading. If the interests of the pair are closely tied to those of the group, the evolution of local genotypes each adapted for optimum exploitation of the environment would make sense of the observation that birds tend to return to the area of birth, perhaps otherwise hard to explain. My Gannet data suggest that young tend to return even to the area of the cliff from which they fledged. This may be hard to account for in terms of refined habitat-selection, though one can have a good try. It is at least possible that by so doing, their chance of breeding successfully is enhanced irrespective of the way the author suggests.

It would be irrelevant to pick out some of the inevitable small errors which specialist knowledge could correct, since these do not materially affect the theory. Sometimes, however, the language used in behaviour descriptions sounds highly subjective (*e.g.* use of words like "bitterness"). This may be a minor point, but I am not sure. Whatever one may wish Professor Wynne-Edwards had included (such as more discussion on the consequences of the theory), he has surely produced that rare combination—a monumental book which, far from being monumentally dull, is genuinely exciting—in the way it assembles such a weight of relevant factual material and attempts to explain it in terms of his theory, rather than sticking to safely trodden paths. The geneticists may catch up and produce a mechanism by which disadvantageous genotypes can persist in a population until group-selection becomes important enough to override them (if it can). Even if many of the author's interpretations turn out to be wrong, as may very easily happen, this work must stimulate future thinking on the subject of animal population control-mechanisms. It may even turn a few biologists away from the laboratory into the field.

(This review was written before the recent Edward Grey Institute Conference, at which Professor Wynne-Edwards discussed criticisms of his theory).

J. BRYAN NELSON.

THE MIGRATIONS OF BIRDS. By J. Dorst. London, Heinemann, 1962. Pp. xix + 476; 131 text figures. 50/-.

This is "a comprehensive study of bird migration," first published in French in 1956, and now brought largely up to date for the English version. The book lives up to the publishers' claims and achieves a remarkable amount of factual illustration from nearly all the most important publications on the subject. Its title is significant, for it is not just another book generalising about bird migration but an account of all the diverse migrations of many types which birds make the world over. Perhaps its chief value is the main point which the author puts across—that "migrations must be considered in the framework of ecology," that whereas the psychological behaviour of birds is usually stereotyped and more inflexible than that of mammals, their behaviour in relation to their environment shows an infinite variety of adaptation. Migration is different between species, and even subspecies, and can be different between individuals. It is in fact a characteristic of populations rather than species. Any attempt to generalise about migrations, multiple almost as birds themselves, is doomed to failure; and under nearly every heading in this book examples are given to show how every theory about migration fits some species but not others, and how in every argument about migration both sides are usually right—but about different birds.

There are one or two unfortunate impressions left by the book as a whole. It suffers a little from being a translation, the style of which is rather ponderous. One feels that the author is too anxious to cover every aspect of every subject, when he would have done better to select examples. As a result there is too much repetition, and to many the book will be too long-winded, some of the text being either obvious or of limited interest. But perhaps this is unavoidable in a work which attempts world coverage of a very complex subject. A bibliography of 53 pages is one indication of Professor Dorst's breadth of research. There is a real wealth of data, summarised from countless research projects, and much of it illustrated by maps, diagrams and charts. Naturally most of the known facts concern migration in America and Europe where most of the study has been done. It will be a revelation to many British students of migration how different are the patterns and problems in America, how little is known about them in much of Asia, and how limited and local a view we get of the whole phenomenon from our own Scottish bird observatories and their work.

Nevertheless, the North Sea migrations are treated perhaps rather too scantily, considering the amount of data which has been collected and published. The treatment of

Williamson's "drift" theory appears to be based on only a few isolated papers on particular movements and not on the Fair Isle and Isle of May data as a whole. Those who seek to find a resolution of the Williamson—Lack controversy on the interpretation of this data will not find it here, even though the author appears to accept Williamson's hypotheses. In the chapter on modes of migration, Dorst makes a telling remark —"In any case," he says, "no general rule applies to the relationship between migrations and wind, so it is not surprising that authors fail to agree on this complex problem. Once again it should be emphasised that the behaviour of birds is extremely plastic."

It must also be said that the author's knowledge of the B.T.O.'s work and the chain of British bird observatories is clearly not what it might be. After mentioning only Fair Isle, the Isle of May, Spurn Head and Skokholm, he includes "St Kilda off the Hebrides where James Fisher has done remarkable work, not to mention Slimbridge in England where Peter Scott and the Wildfowl Trust are observing migrating ducks and geese." It clearly pays to be a television personality, and one wonders how the wardens at the next B.T.O. Bird Observatories Conference will appreciate such recognition?

Although the book is as up to date as can be expected, it was perhaps unfortunate to publish such a survey in 1956. Many new studies are only now beginning to reveal their true value: the interpretation of North Sea migrations has still not been settled; radar research has completely altered both our ability to detect the scope and direction of migration and our assessment of the value of the records we have been building up by more laborious, but more precise, methods over the years. But perhaps the clearest indication of how quickly facts become out of date in these days of extensive research is the section on ringing, where the British total "up to 1959" is given—2 million birds, half of them ringed since 1950. Now it must be well over 3 million birds, after only three more years. The latest published annual total is 350,000 for 1961, compared with the latest in this book of 200,000 for 1958, which is misquoted as 20,000—a figure scarcely flattering to British ringers.

After the chapter on methods of study, which is the least up to date, more than half the book is devoted to accounts of the various migrations that have been recorded all over the world. It is a fascinating story; but the best chapters are those on modes of migration, the physiological stimulus involved, and on orientation. To layman and expert alike, we have here an authoritative summary of all the startling recent discoveries which have taught us both how much—and how little—we know about bird migrations. Who would have guessed only fifteen years ago that most of the massive movements of birds over the earth's surface are controlled in one sense by the tiny pituitary gland and in another by the sun, the moon and the stars?

C. K. MYLNE.

THE BIRDS OF THE BRITISH ISLES. Vol. XI. By D. A. Bannerman. Illustrated by G. E. Lodge. Edinburgh and London, Oliver & Boyd, 1962. Pp. xv + 368; maps, line drawings, and 32 colour plates. 63/-.

This book deals with the Cream-coloured Courser, pratincoles, Stone Curlew, bustards, Crane, terns and gulls. The beautiful production and the high standard of the previous volumes of this major work are maintained. There is, throughout, a personal approach to each bird, and the happy formula of allowing regional experts to speak for themselves gives us such stimulating essays as those on the White-winged Black Tern and Sabine's Gull. The plates are alive and full of character, though some of the nests and eggs are rather stylistic and there is a suspicion of invisible black threads suspending the Whiskered Terns.

The pratincoles are retained as distinct species, and enough evidence is given to suggest that neither side has fully proved its case. The single British record of a Royal Tern (found long-dead and half-buried in the sand) is rejected, and many readers will support the view that it is impossible to know "*for certain* how it reached its destination." A more provocative opinion, in this age of protection and public opinion, is that no species should be added to the British List until it has been handled "dead or alive." Is it really necessary to collect the next Wilson's Phalarope when this easily recognized bird has been seen by many dozens of competent birdwatchers? That the "proof" may bring its own problems is shown by the recent unhappy episode of a hybrid diving duck.

The case of the Hastings Rarities is a particularly vexing one for a work caught, as it were, in mid-stream, and Dr Bannerman's request for more information has now been met by *British Birds*. Vivid illustration of the problem is given by the listed Black-winged Pratincoles, with four recorded between 30th April and 3rd May 1913. This same aspect of plurality mitigates against Dr Bannerman's acceptance of the record of three Cream-coloured Coursers in Lanarkshire in October 1949. The other four post-*Handbook* records are of single birds, and the two "pairs" mentioned in *The Handbook* have been swept away by the Hastings Rarities avalanche.

Although Sabine's Gull is a very uncommon bird in Spitsbergen there are a few more records than the one allowed. Dr I. D. Pennie has kindly given me references to two cases where breeding was proved, and a third where eight pairs were "apparently breeding." (*Ibis* 1922: 173; 1924: 488; 1926: 144). Four races of Herring Gull are listed: a North Sea population *argenteus,* which has been separated from the typical South Baltic *argentatus; omissus* which "is the least satisfactory of the populations discussed"; and *taimyrensis* to which the two British records of *heuglini* are referred.

When dealing with the big gulls there is a distinct slant towards the protectionist approach. One does not read of a flycatcher as a "terrible destroyer" of insects or the Barn Owl as a "menace" to rats, but both of these terms are applied to the Greater Black-backed Gull. It would be very unnatural indeed if there was no predation on our teeming sea-bird colonies, and there is little evidence to suggest that the toll exacted by the gulls has any effect at all on breeding numbers: predation on sheep is obviously another matter.

Scottish readers may feel that the statement that "it is only in Ireland that the Roseate Tern can be seen . . . in any numbers," does less than justice to our thriving Forth colony. However this is probably a compliment to 25 years of unofficial (but recently officially abandoned!) secrecy. No mention is made of the very interesting nest-sites used by Little Terns in the Uists. There some of the birds breed beside the potato crops on the machair and up to half a mile from the sea. There is no danger from high seas, and there is ample open ground for eggs and cover for the young.

This book is one to read for enjoyment and fresh ideas—a survey of Common and Arctic Terns in Scotland for instance—and is, above all, a meticulous and gracious work.

R. W. J. SMITH.

THE RETURN OF THE OSPREY. By P. Brown & G. Waterston. London, Collins, 1962. Pp. 223; maps, figures, tables, 16 plates. 21/-.

This is a tale that should be widely read by all people interested in wild life and the countryside. It shows clearly what a menace "rogue specimens of mankind" have been and can be to wild life and to the tremendous efforts made by a small group of people, supported by the Royal Society for the Protection of Birds, to encourage the Ospreys in their attempts to breed in Scotland after a gap of approximately 50 years.

The post-war tale of the Osprey, leading to its recent breeding successes, is told by Philip Brown and is most readable; you can sense the frustrations and, at times, the tenseness of events as it works up to the first egg-snatching disaster. It was paramount for the R.S.P.B. to safeguard the birds and to ensure success. The Society spared no energy, and the direct result of the initiative and drive has been the three, now four, successive years of safe breeding, during which many thousands of visitors have had the pleasure of seeing these fine birds at their nest.

George Waterston takes up the tale, tracing in detail the earlier history of the birds in Scotland, which shows up the deplorable greed and selfishness of the collectors that brought about the Osprey's extinction as a breeding species early in the 20th century, prior to the recent happy event. The detail given is unusually interesting, and covers every aspect of the bird's natural history. Mr Waterston hopes that we are entering a new era when birds like the Osprey will not be molested on migration or disturbed at their breeding haunts. One hopes that this may perhaps, with the backing of much public interest, be so, but in the background are new threats added to the old, including the problem of toxic chemicals in the food chain, and the fact that more shot guns and airguns of every description are in the hands of more inexperienced shooters on the line of migration than ever before.

The Osprey story, illustrated with some striking photographs, is linked in this book with the return of the Avocet and Black-tailed Godwit, which highlight varying conservation problems in establishing them in different habitats. The efforts made to encourage these two species reflect great credit on the R.S.P.B., and Gwen Davies puts over the story admirably.

There are, perhaps, a few minor points which might be disputed; it seems doubtful whether an Osprey can lay twice in one year, in two different sites, and then build a frustration nest, as hinted on page 20—experience later showed that when the birds had their eggs taken from one nest they then built a frustration nest elsewhere; and Loch an Iasgair—the loch of the fishermen—does not necessarily denote an Osprey breeding haunt, though in West Sutherland this was often so. Finally, the publishers point out an unfortunate error in the cover blurb, where a location "in the Highlands" should obviously read "in these islands."

PAT. W. SANDEMAN.

THE *Bird Notes* BEDSIDE BOOK. Edited by Gwen Davies. The Royal Society for the Protection of Birds, 1962. Pp. 139; figures, line drawings, 17 plates (one on cover). 10/-.

P. E. Brown in his introduction to this anthology writes, "It is not my task to review the contents of this delightful volume which contains so much good reading and good humour but it is pleasing to note over what a wide field the subject matter ranges . . . My impression is that this book will be to the taste, almost in its entirety, of all those who enjoy birds and bird watching in whatever shape or form." Mr Brown is perfectly right on all counts.

Miss Gwen Davies, the editor, has clearly gone to great trouble to collect a well balanced selection of 34 of the best contributions which have appeared in *Bird Notes* during the last 15 years. If your taste is for the humorous you can revel in Professor Meiklejohn's four masterpieces, which include that kindly satire on bird identification books, "How to identify birds," and the now international "Notes on the Hoodwink," both in their U Certificate form. The original unexpurgated versions can be read in the Isle of May Bird Observatory log book.

Dr Bruce Campbell's "Birdmanship" and J. K. Stanford's "Marsh music" should also make you chuckle. The Thunderer Dr (Cassandra Lark) Lack presages a dreadful doom for birdwatchers in "A vision of Rome."

If you are a list bagger then "A Scottish century" and "Suffolk replies to Scotland" will bring back the joys of the chase and suggest good areas in which to see many species in a short holiday. "The breeding habits of hornbills" by R. E. Moreau, in a quite different vein, is a thoroughly knowledgeable and very readable description of the true facts of the imprisonment of the female hornbill in the nest hole during the nesting period.

Anthony Buxton writing of the "Capercaillie" gives a fascinating description of the reintroduction of this species into Scotland by his great-grandfather. P. H. T. Hartley contributes a controversial essay on W. H. Hudson's works, while W. B. Alexander encourages the thirsty to record new bird inn signs.

George Waterston, in "Bird protection in Scotland," traces the grim history of the past before the triumphant return of the Osprey as a breeding species guarded by the R.S.P.B. If your taste is for "howlers" made by school-children you will find them at the end of quite a number of chapters.

In general the remaining articles are vignettes of birdwatching experiences, all of them good bedside reading. There are 17 bird photographs and ten quite delightful, and quite anonymous, black and white drawings of birds.

This book is a "must" for the guest bedroom. When you buy it, as well as cementing a reputation for "hostmanship," you will have helped the funds of the R.S.P.B. whose bird protection work is of ever growing importance. If there are no birds left there will be no future for bird-watching.

J. H. B. MUNRO.

ANIMAL WONDERLAND. By F. W. Lane. Edinburgh and London, Oliver & Boyd, 1962 revised edition. First published by *Country Life,* 1948. Pp. xiv + 136; line drawings, 25 plates (1 in colour). 18/-.

This is a fascinating little book in the "wonders of Nature" tradition. Such an approach has rather fallen into disrepute, because of the exaggerated nonsense served up in the past to the layman as scientific fact, but the author of *Animal Wonderland* very largely avoids this fault, providing an impressive list of references at the end of each chapter in support of what he writes. Occasional dubious or unconvincing speculation is more than balanced by frequent warnings that things may not always be what they seem.

The general chapters contain a mass of curious, sometimes even macabre, but always fascinating facts; such as the sad story of the bear which found a 20 lb cache of dried apple chips, ate the lot, took a drink at a nearby stream, and burst! In contrast to these slightly hotchpotch sections, the historical chapters on the bison and the Passenger Pigeon have a gripping tale to tell. That a bird whose numbers were counted in thousands of millions could be utterly exterminated in half a century is something to ponder.

On many of the subjects discussed, either no books have been written or these are not readily available. Among other ornithological topics there are chapters on birds versus aeroplanes, and on anting; but the scope of the book is so wide that one is constantly coming across unexpected little snippets and anecdotes about birds.

It is generously illustrated with first class photographs, including a particularly impressive series of chameleon, owl, kingfisher and mantis in the act of catching their highly mobile prey. To anyone with an enquiring mind *Animal Wonderland* can confidently be recommended; it can hardly fail to stimulate and set one thinking.

ANDREW T. MACMILLAN.

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

SUMMER EXCURSIONS

Members are reminded that they may attend the excursions of Branches other than their own if they wish to do so.

ABERDEEN

For all excursions, please notify Culterty Field Station, Newburgh (Tel. Newburgh 260) **one week in advance.** All transport will be by private cars, so will members with spare seats please notify Culterty. Expenses will be shared.

Sunday 12th May

CULBIN FOREST (subject to permission being granted by the Forestry Commission)—Leader, W. Milne. Meet Forestry Commission office, Kintessock, 10.30 a.m. Bring picnic lunch and tea.

Sunday 26th May

BLACKHALL FOREST (subject to permission being granted by the Forestry Commission)—Leader, C. Murray. Meet at Blackhall main gate, 10.30 a.m. Bring picnic lunch and tea.

Sunday 16th June

WHINNYFOLD (walk along cliffs to Collieston)—Leader, Dr G. Dunnet. Meet Whinnyfold village, 10 a.m. Bring picnic lunch and tea.

Sunday 18th August

YTHAN ESTUARY AND LOCHS (autumn migrants)—Leader, to be arranged. Meet Ythan Hotel, 10.30 a.m. Bring picnic lunch and tea.

AYR

Saturday 16th March

GALLOWAY—Leader, A. D. Watson. Meet Wellington Square, Ayr, 9 a.m., or rendezvous the Square, Dalry, Kirkcudbrightshire, 10.30 a.m. Bring picnic lunch.

Saturday 11th May

BARR MEADOWS, RENFREWSHIRE—Joint excursion with Glasgow Branch. For arrangements, see under Glasgow excursions.

Saturday 25th May

AUCHINCRUIVE ESTATE (by kind permission of the Principal, West of Scotland Agricultural College)—Leader, Dr M. E. Castle. Meet main entrance, Mauchline road, 2.30 p.m. Bring picnic tea.

Saturday 8th June

TAIRLAW BRIDGE TO LOCH LURE—Leader, R. M. Ramage. Meet Tairlaw Bridge, near Straiton, 3 p.m. Bring picnic tea.

Saturday 22nd June

GIRVAN TO BALLANTRAE AND GLENAPP ESTATE (by kind permission of Lord Inchcape)—Leader, R. M. Ramage. Meet Wellington Square, Ayr, 2.30 p.m., or rendezvous Shalloch corner, ½ mile south of Girvan, 3.15 p.m. Bring picnic tea. This excursion will finish late, as it is hoped to see Nightjars.

Saturday 6th July

LITTLE CUMBRAE (by kind permission of Highland Engineering Ltd., Edinburgh)—Leader, G. Fraser. Boat leaves Fairlie jetty, 11 a.m., fare approx. 7s. Bring picnic lunch and tea. Applications by 22nd June to Dr M. E. Castle, Mount Hamilton, St Quivox, by Ayr. (For conditions of landing, see under Glasgow excursions).

Saturday 20th July

HORSE ISLAND (by kind permission of the R.S.P.B.)—Leader, G. Fraser. Boat leaves Ardrossan Harbour, 3 p.m., fare approx. 5s. Bring picnic tea. Applications by 6th July to Dr M. E. Castle, address above.

Saturday 14th September

BARASSIE—Leader, G. A. Richards. Joint excursion with Glasgow Branch. Meet Troon Gasworks, north shore road, 2.30 p.m.

DUMFRIES

Sunday 19th May

DRUMLANRIG WOODS—Leaders, J. Maxwell and J. Young. Meet Ewart Library, 2 p.m.

Sunday 2nd June

DALRY AREA, KIRKCUDBRIGHTSHIRE—Leader, A. D. Watson. Meet Ewart Library, 2 p.m.

Sunday 16th June

FARNE ISLANDS—A touring bus has been booked to leave at 7 a.m. from the Whitesands (opposite Bank Street), cost 27s 6d. Applications not later than 16th May to H. M. Russell, Nara, Dalbeattie Road, Dumfries. Take picnic lunch. Members of Dumfries Branch must have priority and bookings for others can only be accepted provisionally.

Sunday 30th June

BALCARRY POINT—Leader, E. L. Roberts. Meet Ewart Library, 2 p.m.

DUNDEE

Where private cars are to be used, applications should be made one week in advance to Jack Scobie, 11 Nevill Street, Dundee (Tel. Dundee 86209).

Sunday 26th May

AMULREE DISTRICT—Meet City Square 9 a.m. Transport by private cars. Bring lunch and tea.

Sunday 9th June

TENTSMUIR AND SHELLEY POINT—Meet Tay Ferry 10 a.m. Public transport. Bring picnic lunch.

Sunday 23rd June

CAIRNGORMS (for Dotterel)—Meet City Square 8 a.m. Transport by private cars. Bring picnic lunch and tea.

Sunday 14th July

ISLE OF MAY or BASS ROCK—Arrangements will be made known later.

Sunday 25th August

YTHAN ESTUARY—Meet City Square 8 a.m. Transport by private cars. Bring picnic lunch and tea.

Sunday 22nd September

EDEN ESTUARY—Meet Tay Ferry 10 a.m. Public transport. Bring picnic lunch.

EDINBURGH

Times of buses and trains should be checked with summer timetables. Costs may also be subject to alteration.

Saturday 11th May

ABERLADY BAY NATURE RESERVE (spring migrants)—Leaders, W. K. Birrell, C. N. L. Cowper, K. S. Macgregor. Meet timber bridge, 2.30 p.m. Bring picnic tea. (S.M.T. bus leaves Edinburgh Bus Station at approx. 1.40 p.m.).

Sunday 2nd June

THE HIRSEL, COLDSTREAM (by kind permission of the Earl of Home)—Leader at the Hirsel, Major the Hon. Henry Douglas Home. Excursion by private cars, sharing petrol expenses. Applications by 25th May to A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13, stating number of spare seats available. Applicants will be informed of place and time of meeting. Bring picnic lunch and tea.

Saturday 22nd June

ISLE OF MAY—Numbers limited to 12. Applications by 18th June to A. Macdonald, Hadley Court, Haddington, East Lothian (Tel. Hadd. 3204). Party meets and sails from West Pier, Anstruther, 11.40 a.m. approx. Train to Anstruther leaving Waverley Station about 9 a.m., will be met at Anstruther Station. Return train leaves Anstruther 6 p.m. (Please check all train timetables). Bring picnic lunch and tea. Cost: Train Day Return approx. 12s 6d; Boat approx. 9s.

Saturday 13th July

FIDRA (by kind permission of the R.S.P.B.)—Numbers limited. Applications by 6th July to M. J. H. Robson, Little Bellwood, Glencorse, Penicuik (Tel. Penicuik 386). Boat leaves North Berwick Harbour, 2.30 p.m., returning approx. 7 p.m. Bring picnic tea. Cost approx. 8s. If weather is uncertain please check with leader on morning of excursion in case of cancellation.

Saturday 27th July

BASS ROCK (by kind permission of Sir Hew Hamilton Dalrymple, Bart.)—Applications by 20th July to J. E. King, 8 Strathearn Place, Edinburgh 9 (Tel. MOR 2671). Boats leave North Berwick Harbour, 2.30 p.m., returning approx. 7 p.m. Bring picnic tea. Cost approx. 8s, Tickets must be obtained at the Harbour Office before embarking. Car parking is not permitted at the Harbour. If weather is uncertain, please check with leader on morning of excursion in case of cancellation.

Saturday 21st September

ABERLADY BAY NATURE RESERVE (autumn migrants)—Arrangements as for 11th May.

GLASGOW

Sunday 28th April

HAMILTON BIRD SANCTUARY (by kind permission of the Town Council of the Burgh of Hamilton)—Leader, D. Stalker. Meet at gates leading to Municipal Golf Course, 2 p.m.

Saturday 11th May

BARR MEADOWS—Joint excursion with Ayr Branch. Leader, G. H. Acklam. Meet at Lochwinnoch Station Yard, 2.30 p.m.

Sunday 2nd June

THE HIRSEL, COLDSTREAM (by kind permission of the Earl of Home)—Joint excursion with Edinburgh Branch. Arrangements as for

Edinburgh, but Glasgow members should send their applications to G. L. A. Patrick, 11 Knollpark Drive, Clarkston, Glasgow.

Sunday 9th June

LITTLE CUMBRAE (by kind permission of Little Cumbrae Estates Ltd.)—Leader, Miss W. U. Flower. Boat leaves Fairlie, 12 noon, fare approx. 5s. Bring picnic lunch and tea. Applications by 25th May to G. L. A. Patrick, address above.

"The permission to visit Little Cumbrae is granted on condition that the company does not warrant the safety of the premises and is under no obligation to protect you from injury or damage by reason of the state of the premises. By entering the premises you will be deemed to have accepted these conditions."

Members participating in this excursion will be expected to sign an acknowledgment that they have read and agreed to the said conditions.

Saturday 15th June

LUSS ISLANDS, LOCH LOMOND (by kind permission of Sir Ivor Colquhoun)—Leader, G. A. Robb. Service bus via Balloch to Luss, alight Bandry Bay half a mile south of Luss. Ferry boat leaves 2 p.m., returning 5.30 p.m. Fare approx. 5s. Bring picnic tea. Applications by 1st June to G. L. A. Patrick, address above.

Wednesday 19th June

HORSE ISLAND (by kind permission of the R.S.P.B.)—Leader, G. Fraser. Boat leaves Ardrossan Harbour, 6.30 p.m., fare approx. 4s. Applications by 25th May to G. L. A. Patrick, address above.

Saturday 29th June

HORSE ISLAND (by kind permission of the R.S.P.B.)—Leader, G. Fraser. Boat leaves Ardrossan Harbour, 2.30 p.m., fare approx. 4s. Bring picnic tea. Applications by 8th June to G. L. A. Patrick, address above.

Saturday 14th September

BARASSIE—Joint excursion with Ayr Branch. For arrangements see Ayr Branch excursions.

Sunday 22nd September

HAMILTON BIRD SANCTUARY (by kind permission of the Town Council of the Burgh of Hamilton)—Leader, M. Forrester. Meet at gates leading to Municipal Golf Course, 2 p.m.

ST ANDREWS

Applications for all excursions should be made to Miss M. M. Spires, 2 Howard Place, St Andrews (Tel. St Andrews 852), not later than one week before each excursion so that transport can be arranged.

Saturday 1st June

LINDORES LOCH AND DUNBOG—Leave St Andrews Bus Station, 2.15 p.m. Bring picnic tea.

Sunday 9th June

ST SERF'S ISLAND, LOCH LEVEN—Leave St Andrews Bus Station, 10 a.m. Boats leave the Sluices, Scotlandwell, 11 a.m. Bring picnic lunch and tea.

Saturday 29th June

TENTSMUIR—Leave St Andrews Bus Station, 2.15 p.m. Bring picnic tea.

WEEKEND EXCURSION TO AVIEMORE

The weekend excursion to Speyside will again be held in the Dell Hotel, Rothiemurchus, Aviemore, from 3rd to 5th May 1963.

Accommodation for up to twenty members has been reserved at inclusive terms of 55s per person, as follows: bed on Friday 3rd; breakfast, packed lunch, dinner and bed on Saturday 4th; breakfast and packed lunch on Sunday 5th.

Members wishing to attend should book direct with Mrs Grant, Dell Hotel (Tel. Aviemore 216), and inform her if they require dinner on Friday night (extra). A stamped addressed post card should be enclosed for reply. Members may bring guests. Arrangements for transport by private cars should be made with Branch Secretaries. Thermos flasks should be brought.

OPERATION OSPREY 1963

The R.S.P.B. will once again require the assistance of volunteer wardens between 6th April and mid-August to guard the Opsreys at Loch Garten and to act as guides to the public visiting the observation post in the sanctuary area. Wardens will be accommodated at a base camp where food, tents and camp equipment will be provided free. Each person is however expected to bring his own sleeping bag and pillow slip. Provided sufficient wardens are available, preferably for periods of not less than one week at a time, each one will have every third day free of duties. A succession of female cook-caterers will also be required for the period.

Anyone wishing to assist should send full details and references as soon as possible to George Waterston, 21 Regent Terrace, Edinburgh 7.

DR CONSTANCE HIGGINBOTTOM

It is with great regret that we have to announce that Dr Constance Higginbottom, first Secretary of the recently formed Ayr Branch, died on 21st November 1962 in the Ayrshire Central Hospital Irvine, at the age of 57. She had been in indifferent health for some time.

"Dr Hig.", as she was affectionately known to her many friends, though a native of Dunbartonshire, received most of her education in England. At Manchester University she gained an Honours Degree in Chemistry and a Diploma in Bacteriology. She became a Ph.D. of Leeds University following a period of research work there.

Returning to Scotland, she joined the staff of the Hannah Dairy Research Institute, Ayr, where she served with distinction for 23 years, latterly becoming a principal scientific officer.

She was a member of the S.O.C. and an enthusiastic amateur ornithologist of many years standing, and was largely instrumental in the successful launching of the new Ayr Branch last year. The Branch will greatly miss her thorough and efficient work in committee.

A most generous gesture on the part of Dr Higginbottom's three sisters was to present to the Ayr Branch her large collection of ornithological reference books to start a Branch library, a most fitting way to perpetuate the memory of a highly esteemed founder-member and a devoted worker in the affairs of the Branch.

R. M. RAMAGE, Chairman, Ayr Branch.

NEW SECRETARY, AYR BRANCH

The new Secretary of the Ayr Branch is Dr M. E. Castle, whose address is St Quivox, Mount Hamilton, by Ayr. Dr Castle replaces the late Dr Constance Higginbottom, whose death is reported above.

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NOTICE TO CONTRIBUTORS

The attention of contributors is drawn to the suggestions, last printed in the Autumn 1962 issue of the journal, about the form in which papers and notes should be submitted. It will be particularly appreciated if material for Current Notes is sent at the appropriate time—to reach the editor **before the end of June, September, December and March,** and **not** just after these dates.

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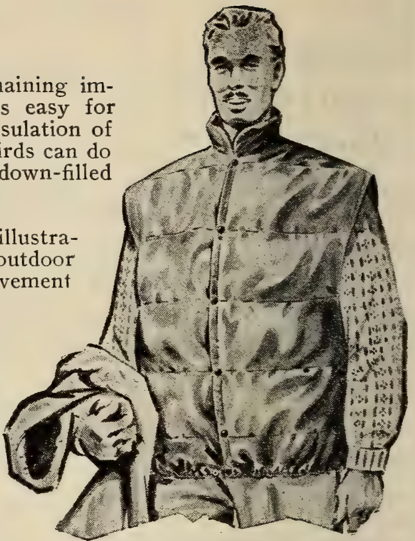

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SCOTTISH BIRDS

The Journal of The Scottish Ornithologists' Club

Vol. 2 No. 6 *Summer 1963*

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EDITORIAL ADDRESS

All contributions to A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Advertisements to T. C. Smout, 93 Warrender Park Road, Edinburgh 9.

NOTICE TO CONTRIBUTORS

The attention of contributors is drawn to the suggestions, last printed in the Autumn 1962 issue of the journal, about the form in which papers and notes should be submitted. It will be particularly appreciated if material for Current Notes is sent at the appropriate time—to reach the editor **before the end of June, September, December and March,** and **not** just after these dates.

HANDA BIRD RESERVE, SUTHERLAND

THE famous island sea-bird sanctuary of Handa lies close inshore off the north-west coast of Sutherland, three miles north-west of Scourie. It was established as a Bird Reserve by the Society in 1962 by agreement with the proprietors.

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By means of a grant from the Helena Howden Trust, the R.S.P.B. has re-roofed, reconditioned, and furnished the shepherd's Bothy—a two-roomed house. It is equipped with four sets of two-tier bunks, calor gas cooker, tables, chairs etc. and a kitchen sink. Blankets, pillows, crockery, cutlery and cooking utensils are all supplied. There is a small annexe containing a wash-hand basin, W.C., and a Store.

Visitors must bring their own sleeping bags (or sheets) and pillow slips, and must bring and cook all their own food.

The charge for accommodation is 5s per person per night. This includes free use of calor gas and paraffin.

Bookings for the Bothy can only be accepted from Members of the R.S.P.B. (annual subscription, one guinea) but Members can invite friends (non-members) to accompany them.

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Wanted : Scot. Nat. 1884-91; **Birds of E. Lothian** (Turnbull 1867); **Addenda** to **Birds of Dumfries** (Gladstone 1911).

For sale : Scot. Nat. 1935-57, complete, bound, 15 vols. in 14—£10. Andrew T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13.

Fair Isle Bird Observatory requires young married couple to take over research and administration of the Observatory from 1st July 1963. Write stating experience and qualifications to George Waterston, 21 Regent Terrace, Edinburgh 7.

SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 2 No. 6 **Summer 1963**

Edited by A. T. MACMILLAN with the assistance of D. G. ANDREW and T. C. SMOUT. Business Editor, T. C. SMOUT. Cover Design (Whimbrel) by LEN FULLERTON. *Published quarterly.*

Editorial

Wild life and toxic chemicals. Publication of Rachel Carson's *Silent Spring,* attacking the agricultural use of dangerous and often imperfectly understood chemicals, created a tremendous furore in the U.S.A. In spite of some large kills of birds, the problem has not yet reached the same proportions in this country, and reaction has been milder, or more complacent, depending on how one views the question. Nevertheless, the Association of British Manufacturers of Agricultural Chemicals has thought it worth producing a *Review and Commentary* on the book in order to present its own assessment of the situation in Great Britain.

Although it cannot be denied that some of Miss Carson's more horrific visions are largely hypothetical, yet equally it is true that it is not possible to prove they will not come to be. The important point is that the book directs attention to the whole subject and to the urgent need for more research and vigilance. The dangers and problems are with us now, and whether they are as dreadful as is suggested will not be known with certainty until it may be too late. There is a review of *Silent Spring* on another page. Everyone who finds pleasure in the countryside and its wild life must read this book. Copies can be had through the S.O.C. Book Agency, 21 Regent Terrace, Edinburgh 7.

Film competition. Our special congratulations go to Charles Palmar, curator of the Department of Natural History in the Glasgow Art Gallery and Museum, but also chairman of the Glasgow Branch of the S.O.C. In a recent natural history film competition for amateurs, organised by the B.B.C. and the Council for Nature, he was joint winner of the £700 first prize for a film suitable for television. His entry, "Highland Heronry," shows the Heron and its neighbours on a sea loch in the West Highlands.

REVIEW OF ORNITHOLOGICAL CHANGES IN SCOTLAND IN 1962

DOUGAL G. ANDREW

Introduction

This is the tenth report of the Scottish Bird Records Committee, and it is concerned with records *published* during 1962 together with some records carried forward from earlier years. The journals searched, with the abbreviations used in this report, are as follows: *Scottish Birds* (*SB*), Vol. 2: 1-276; *The Scottish Naturalist* (*SN*), 1961 and 1962; *British Birds* (*BB*), Vol. 55; *Bird Migration* (*BM*), Vol. 2: 61-204; *Bird Study,* Vol. 9, *Fair Isle Bird Observatory Bulletin* (*FIBOB*), Vol. 4: 207-236; *Bird Notes* (*BN*), Vol. 30: 1-160; *Ibis,* Vol. 104; *Bulletin of the British Ornithologists' Club* (*Bull. BOC*), Vol. 82. Use has also been made of a most valuable manuscript by Henry Boase—*Birds of North and East Perth* (*BNEP*)—of which further information will be found in a detailed review (*SB* 2: 266). Abbreviations are also used for the following works which are referred to more than once: *The Birds of Scotland,* 1953 (*BofS*); *Geographical Distribution and Status of Birds in Scotland,* 1928 (*GDSBS*).

The only change in the composition of the Committee since its last report has been an internal one. Dr James Campbell, who has been the Committee's Chairman for the past three years and who has so capably undertaken the main burden of preparing these reports, has felt obliged to retire from this office owing to pressure of other business. The Committee wishes to pay tribute to the valuable work Dr Campbell has done on its behalf. It is good to know that his experience will continue to be available as an ordinary member of the Committee.

The previous reports of the Committee have been published as follows: *SN* 1955: 98; 1956: 1; 1957: 37, 170; and *SB* 1: 30, 117, 253, 443; 2: 192.

BIRDS NEW TO SCOTLAND

SEMI-PALMATED SANDPIPER *Calidris pusilla.* The 1956 Fair Isle record (*SN* 1957: 145) accepted by this Committee as the first for Scotland (*SB* 1: 30, 76) has now been shown (*BB* 56: 55) to have been a Western Sandpiper (see below). The 1957 Isle of May record (*SB* 1: 35) is now accepted as the first (and so far the only) occurrence of the Semi-palmated Sandpiper in Scotland.

WESTERN SANDPIPER *Calidris mauri.* One seen (and subsequently trapped), Fair Isle, 28th May 1956 (*SN* 1957: 145 *sub voce*

Semi-palmated Sandpiper, see also *BB* 56: 55). This is also the first British record.

DUSKY THRUSH *Turdus eunomus.* One seen (and subsequently trapped), Fair Isle, 18th October 1961 (*FIBOB* 4: 209). This is the third British record, the other two both being from England.

AMERICAN ROBIN *Turdus migratorius.* One seen, Grimsetter aerodrome, Orkney, 27th May 1961 (*BB* 55: 577). This is the fourth British occurrence, the species having been recorded once in England and twice in Ireland.

RIVER WARBLER *Locustella fluviatilis.* One trapped, Fair Isle, 24th September 1961 (*BB* 55: 137). This is also the first British record.

BONELLI'S WARBLER *Phylloscopus bonelli.* One trapped, Fair Isle, 22nd September 1961 (*BB* 55: 278). This species (first identified in Britain in 1948) has now been recorded nine times in England/Wales and twice in Ireland.

BIRDS NEW TO AREAS AND COUNTIES

GANNET *Sula bassana.* One between Drymen and Aberfoyle, 24th September 1961 (*SB* 2: 40); first for West Stirling. The Committee does not accept an earlier undated record (*BB* 38: 18).

FRIGATE-BIRD *Fregata* sp. One off Forvie, 20th August 1960 (*BB* 53: 455; 55: 565); first for Dee and Aberdeen.

[WHITE STORK *Ciconia ciconia.* One, Lochmaben, Dumfriesshire, 17th April 1961 (*SB* 1: 451); the tameness of this bird and the fact that one is known to have escaped from captivity early in the year must, in the Committee's opinion, raise serious doubts as to whether this was a genuine wild bird.].

SPOONBILL *Platalea leucorodia.* One (later joined by two others), mouth of the River Annan, 26th May 1962 (*SB* 2: 242); first for Solway and Dumfries.

GREEN-WINGED TEAL *Anas crecca carolinensis.* It has been pointed out (*BNEP*: 45) that this Committee was wrong in accepting (*SN* 1955: 100) the 1952 Carsebreck record as the first for Tay and North Perth. Carsebreck lies within Forth and South Perth and the 1952 record is accordingly the first for this area and county. There is at yet no record for Tay. The 1961 Midlothian record accepted in our last report (*SB* 2: 192) as the first for Forth is in fact the second for this area.

GARGANEY *Anas querquedula.* One, Stormont Loch, 25th April 1953 (*BNEP*: 45); first for North Perth.

GADWALL *Anas strepera.* Two, Tullibody Island, 5th March 1960 (*SB* 2: 40); first for Clackmannan.

GOLDENEYE *Bucephala clangula*. Two, St Kilda, 10th October 1961 (*SB* 2: 70); first for St Kilda.

LONG-TAILED DUCK *Clangula hyemalis*. One, Kingoodie, 5th November 1922 (*BNEP*: 53); first definite record for North Perth, although the species has been described as "Winter?" (*GDSBS*: 252).

VELVET SCOTER *Melanitta fusca*. One, Skinflats, 23rd October 1961 (*SB* 2: 41); first for East Stirling. A dead bird at Kingoodie, 4th March 1923 (*BNEP*: 53); first for North Perth.

EIDER *Somateria mollissima*. Four, Kingoodie, 16th May 1920 (*BNEP*: 54); first definite record for North Perth, although the species has been described as "Occasional?" (*GDSBS*: 253).

GREY LAG GOOSE *Anser anser*. One, Eagle Rock, 14th April 1962 (*SB* 2: 202); first for West Lothian.

[GREATER SNOW GOOSE *Anser caerulescens atlanticus*. One Libberton, first seen December 1959 (*SB* 1: 272; 2: 203); first record of this race for Clyde and Lanark. One, Caerlaverock, 13th October 1961 (*SB* 2: 203); first record of this race for Dumfries. The Committee accepts the correctness of the subspecific identification in these records, but again stresses that it is almost impossible to be sure that the bird (for it seems almost certain that these and other recent records all refer to the same individual) was not an escape from captivity (see *BB* 54: 182 and *SB* 2: 306). It has been implied that this bird was seen in Peebles (*SB* 2: 203; see also *BB* 55: 570) but the Committee is informed that the bird was not in fact seen to cross the county boundary.].

BARNACLE GOOSE *Branta leucopsis*. The statement that "After the human population was evacuated from Island Roan in 1938 Barnacle Geese began to winter there and on the adjacent Eilean Iosal" (*SB* 2: 178) appears to provide the first definite record for North Sutherland, though Dr John Berry states that the Barnacle Goose "occurs sporadically along the North Coast, chiefly on small islands, but nowhere can be termed common" (*The Status and Distribution of Wild Geese and Wild Duck in Scotland,* 1939: 49). The species was first definitely identified in North Sutherland on 6th January 1949 (*SB* 2: 363).

CANADA GOOSE *Branta canadensis*. Four, Fair Isle, 6th June 1962 (*BM* 2: 203); first for Fair Isle. Two pairs with broods near Kelso, 13th June 1962 (*SB* 2: 255); first for Tweed and Roxburgh, although it is in fact known that birds have been present here for some time.

MARSH HARRIER *Circus aeruginosus*. One, Jura, 27th July 1962 (*SB* 2: 256); first for Inner Hebrides.

RED-FOOTED FALCON *Falco vespertinus*. One, Newport area, 21st

November 1941 (*SB* 2: 142); first for Tay and North Fife.

[RED-LEGGED PARTRIDGE *Alectoris rufa*. A flock of 17 near Blair Drummond, South Perth, 28th October 1961 (*SB* 2: 96). The locality is only nine miles from Braco, where it is known that young birds had been released the previous year. There is no evidence known to the Committee that this species has yet succeeded in establishing itself anywhere in Scotland.].

KENTISH PLOVER *Charadrius alexandrinus*. One, Ythan Estuary, 3rd May 1962 (*SB* 2: 246); this (the second Scottish record) is the first for Dee and Aberdeen.

TURNSTONE *Arenaria interpres*. One, Kingoodie, 3rd September 1922 (*BNEP*: 81); first for North Perth.

WHIMBREL *Numenius phaeopus*. "Common every autumn on Clackmannan shore of the Forth" (*SB* 2: 41); the first published reference to the occurrence of this species in Clackmannan.

BLACK-TAILED GODWIT *Limosa limosa*. One near Cambus, 12th September 1953 (*SB* 2: 41); first for Clackmannan.

BAR-TAILED GODWIT *Limosa lapponica*. Seven, Alloa Inch, 19th September 1953 (*SB* 2: 41); first for Clackmannan.

GREEN SANDPIPER *Tringa ochropus*. One, Kerloch Hill, 7th August 1962 (*SB* 2: 257); first for North Kincardine.

WOOD SANDPIPER *Tringa glareola*. One, Orchard Farm, 11th September 1960 (*SB* 2: 41); first for Clackmannan. Three or four near Troup Head, 21st August 1962 (*SB* 2: 257); first for Banff.

SPOTTED REDSHANK *Tringa erythropus*. One, mouth of River Black Devon, 15th April 1961 (*SB* 2: 41); first for Clackmannan.

KNOT *Calidris canutus*. One, mouth of River Endrick, 20th April 1961 (*SB* 1: 436); first for West Stirling. The observer has confirmed that the bird was seen to alight on both sides of the river at different times.

PECTORAL SANDPIPER *Calidris melanotos*. One, Fair Isle, 16th September 1961 (*FIBOB* 4: 209); first for Fair Isle.

WESTERN SANDPIPER *Calidris mauri*. (See under "Birds New to Scotland" above); first for Shetland and Fair Isle.

BUFF-BREASTED SANDPIPER *Tryngites subruficollis*. One, St Kilda, 15th June 1962 (*BM* 2: 204; *SB* 2: 299); first for Outer Hebrides and St Kilda.

RUFF *Philomachus pugnax*. Three, Rhind, 7th August 1960 (*SB* 2: 41); first for Clackmannan.

PHALAROPE *Phalaropus* sp. Two, St Kilda, 12th October 1961, "probably Grey Phalaropes" (*SB* 2: 71); first record of any phalarope for St Kilda.

GREAT SKUA *Catharacta skua*. One, Eden Estuary, 17th September 1961 (*SB* 2: 148); first for North Fife. One off Mallaig 26th May 1962 (*SB* 2: 206); first for West Inverness. The statement by Dr I. D. Pennie that "I have details of four subsequent unpublished records from the north and west (*SB* 2: 182) is the first published indication of the occurrence of this species in North Sutherland. The first record was in fact of one near Cape Wrath lighthouse on 19th August 1954 (*SB* 2: 363).

ARCTIC SKUA *Stercorarius parasiticus*. One, Tullibody Island, 1st October 1960 (*SB* 2: 42); first for Clackmannan.

IVORY GULL *Pagophila eburnea*. Dead bird at Templehall in early January 1956 (*BNEP*: 95); first for Tay and North Perth.

GREAT BLACK-BACKED GULL *Larus marinus*. "In winter flocks of between 6 and 24 may always be seen at certain favoured places in the Alloa area" (*SB* 2: 42); first published reference to the occurrence of this species in Clackmannan.

ICELAND GULL *Larus glaucoides*. One shot, Aberfeldy, 19th June 1926 (*BNEP*: 99); first for North Perth. One, Sheigra, 14th May 1962 (*SB* 2: 259); first for West Sutherland.

LITTLE GULL *Larus minutus*. One, St Kilda, 15th May 1962 (*BM* 2: 204, *SB* 2: 299); first for St Kilda.

BLACK TERN *Chlidonias niger*. One, mouth of the River Spey, 16th August 1962 (*SB* 2: 259); first for Moray. One, Loch Morlich, 18th August 1962 (*SB* 2: 259); first for East Inverness.

LITTLE TERN *Sterna albifrons*. One, Kingoodie, 26th July 1924 (*BNEP*: 104); first for North Perth.

COLLARED DOVE *Streptopelia decaocto*. One, South Ronaldsay, 23rd July 1962 (*SB* 2: 247); first for Orkney. Two, Invergordon, 3rd August 1962 (*SB* 2: 247); first for East Ross.

ALPINE SWIFT *Apus melba*. One, Unst, 13th June 1962 (*SB* 2: 249); first for Shetland.

GREEN WOODPECKER *Picus viridis*. Has been noted in Kirkcudbrightshire at least since 1957 (*SB* 2: 43); first published reference to the occurrence of this species in Kirkcudbrightshire apart from an unsatisfactory second-hand record from the Kirkcudbrightshire/Wigtownshire border about 1883 (*BofS* 1: 254). See also under "First Breeding Records." One, St Mary's Loch, 12th November 1961 (*SB* 2: 43); first for Selkirk. One at Gartocharn, 31st August 1962 (*SB* 2: 261), is the first evidence that the current extension of range has reached Dunbarton. There is, however, an earlier undated record (*A Fauna of the Tay Basin and Strathmore*. 1906: 163) which the Committee accepts as the first record for Clyde and Dunbarton.

GREAT SPOTTED WOODPECKER *Dendrocopos major.* The 1953 breeding record at Lochmore (*SB* 2: 184—see under "First Breeding Records" below) is also the first recorded occurrence of the species in West Sutherland.

[WHITE-WINGED LARK *Melanocorypha leucoptera.* One seen, Loch Scarmelett, Caithness, 8th June 1958 (*BB* 51: 320). This record is not accepted by the Committee.].

SHORE LARK *Eremophila alpestris.* Four, Ythan Estuary, 30th December 1961 (*SB* 2: 105); first for Dee and Aberdeen.

JACKDAW *Corvus monedula.* "Jackdaws at Elphin in July 1958" (*SB* 2: 185); first published mention of the occurrence of this species in West Sutherland, though birds were in fact present in the same area as early as 1953 (*SB* 2: 364).

GREAT TIT *Parus major.* One (probably two), Stornoway Woods, 25th March 1962 (*SB* 2: 91); first for Outer Hebrides. The Committee can find no evidence to support the statement in Saunders' *Manual of British Birds,* 3rd Edn., 1927: 148, that this species breeds at Stornoway.

BLUE TIT *Parus caeruleus.* Two or more, Stornoway Woods, 7th November 1961 (*SB* 2: 43); first for Outer Hebrides. The Committee can find no evidence to support an earlier description of this species as "Resident" (*GDSBS*: 78) nor the implication this it has occurred in the Outer Hebrides (*BofS* 1: 128).

LONG-TAILED TIT *Aegithalos caudatus.* "Has been confirmed as breeding in ... Lochinver, and recorded from Scourie" (*SB* 2: 186); first published reference to the occurrence of this species in West Sutherland. The earliest record is in fact of a family party at Loch a' Mhuillin between 4th and 16th June 1951 (*SB* 2: 364).

DUSKY THRUSH *Turdus eunomus.* (See under "Birds New to Scotland" above); first for Shetland and Fair Isle.

AMERICAN ROBIN *Turdus migratorius.* (See under "Birds New to Scotland" above); first for Orkney.

ROCK THRUSH *Monticola saxatilis.* One, St Kilda, 17th June 1962 (*BM* 2: 204; *BB* 56: 66); this (the fourth Scottish record) is the first for Outer Hebrides and St Kilda.

[GREENLAND WHEATEAR *Oenanthe oenanthe leucorrhoa.* One, Pentland Hills, 12th May 1962 (*SB* 2: 210); this would be the first record of this race in Peebles, but the Committee considers that the existence of intermediate populations makes it impossible to identify with certainty the various races of the Wheatear in the field.].

BLACK REDSTART *Phoenicurus ochruros.* One obtained near Eliock, March 1947 (*SB* 2: 263); first for Dumfries.

RIVER WARBLER *Locustella fluviatilis.* (See under "Birds New to Scotland" above); first for Shetland and Fair Isle.

Chiffchaff *Phylloscopus collybita*. Three, St Andrews, 21st April 1962 (*SB* 2: 212); first for North Fife.

Bonelli's Warbler *Phylloscopus bonelli*. (See under "Birds New to Scotland" above); first for Shetland and Fair Isle.

Arctic Warfler *Phylloscopus borealis*. One, Isle of May, 5th September 1961 (*SB* 2: 18); first for Forth and Isle of May.

Dusky Warbler *Phylloscopus fuscatus*. One, Fair Isle, 14th October 1961 (*BB* 55: 190); this (the second British and Scottish record) is the first for Shetland and Fair Isle.

Goldcrest *Regulus regulus*. "It is now plentiful wherever there are plantations, including Lochinver and Scourie" (*SB* 2: 187); first published reference to the occurrence of this species in West Sutherland. The earliest record was from near Scourie on 10th June 1954 (*SB* 2: 364). One, St Kilda, 5th September 1961 (*SB* 2: 72); first for St Kilda.

Pied Flycatcher *Muscicapa hypoleuca*. One, Strath Dionard, 30th May 1961 (*SB* 2: 44); first for North Sutherland. One, St Kilda, 5th October 1961 (*SB* 2: 72); first for St Kilda.

Tawny Pipit *Anthus campestris*. One, West Lewis, 23rd October 1961 (*SB* 2: 250); this (the sixth Scottish record) is the first for Outer Hebrides.

Rock Pipit *Anthus spinoletta*. One, Kingoodie, 1st January 1928 (*BNEP*: 179); first for North Perth.

Waxwing *Bombycilla garrulus*. One, St Kilda, 14th November 1961 (*SB* 2: 74); first for St Kilda.

Goldfinch *Carduelis carduelis*. Two, St Kilda, 9th November 1961 (*SB* 2: 54); first for St Kilda.

Siskin *Carduelis spinus*. One or two, St Kilda, 12th November 1961 (*SB* 2: 54); first for St Kilda.

Lesser Redpoll *Carduelis flammea disruptis*. Has been recorded regularly on Tentsmuir since about 1930 though not yet proved to breed (*SB* 2: 158); first definite record for North Fife, where the status of this race has been described as "Occasional?" (*GDSBS*: 23).

Hornemann's Redpoll *Carduelis h. hornemanni*. One found dead, West Lewis, 8th April 1962 (*SB* 2: 251); first record for either race of the Arctic Redpoll for Outer Hebrides.

Tree Sparrow *Passer montanus*. Flock of about 15 near Melvich, 24th May 1961 (*SB* 2: 39); first for North Sutherland.

FIRST BREEDING RECORDS FOR AREAS AND COUNTIES

Slavonian Grebe *Podiceps auritus*. Pair with two small chicks on a lochan in Aberdeenshire, 5th August 1962 (*SB* 2: 242); had previously bred there in 1960 and 1961 (*SB* 2: 382);

first breeding record for Dee and Aberdeen.

BLACK-NECKED GREBE *Podiceps nigricollis*. The brief report of breeding "on a Perth loch" in 1949 (*BofS* 2: 504) in fact refers to Stormont Loch, where a pair and two young were seen on 12th June 1949 (*BNEP*: 38); first breeding for North Perth.

FULMAR *Fulmarus glacialis*. Two eggs on Inchgarvie, 27th June 1962 (*SB* 2: 201); first breeding for West Lothian.

WIGEON *Anas penelope*. One pair produced young, Morton Lochs, 1953 (*SB* 2: 133); first breeding for North Fife.

PINTAIL *Anas acuta*. The record of breeding near Kingoodie in 1924 (*BofS* 2: 404) has now been withdrawn by the observer and the record of a female with a brood of five young at Stormont Loch, 6th June 1953 (*BNEP*: 47), is now accepted as the first breeding record for North Perth.

COMMON SCOTER *Melanitta nigra*. Female in flightless moult and two juveniles found dead, Tentsmuir, 1947 (*SB* 2: 135); first breeding for North Fife.

CANADA GOOSE *Branta canadensis*. Two pairs with broods near Kelso, 13th June 1962 (*SB* 2: 255); first breeding for Tweed and Roxburgh—but see comments under "Occurrences" above.

MONTAGU'S HARRIER *Circus pygargus*. The first Scottish breeding records for this species were included without details in an earlier report (*SN* 1955: 104). To prevent confusion in the future, the Committee records that the 1952 and 1953 breeding "in the central highlands" (*Edinburgh Bird Bulletin* 3: 63; 4: 73) provides the first breeding for Forth and South Perth; and that the 1953 breeding "in Galloway" (*SN* 1954: 41) provides the first breeding for Solway and Kirkcudbright.

COMMON GULL *Larus canus*. Single pairs with nests near Sanquhar and at Loch Skene in the summer of 1962 (*SB* 2: 206-207); first breeding for Dumfries.

ROSEATE TERN *Sterna dougallii*. The statement that in 1961 "good numbers" were breeding on Fidra and about 200 pairs breeding on Inchmickery (*BN* 30: 26-27; but see also *SB* 2: 286) is the first published reference to breeding in East Lothian and Midlothian respectively.

COLLARED DOVE *Streptopelia decaocto*. Pair with a nestling which had evidently fallen from the nest, near Dumfries, 10th April 1962; breeding had probably also taken place the previous year (*SB* 2: 199); first breeding for Solway and Dumfries.

GREEN WOODPECKER *Picus viridis*. Has nested in Kirkcudbright since at least 1959 and probably as far back as 1956 (*SB* 2: 261); first breeding for Kirkcudbright. Bred, Lennox Castle, 1960 and possibly also in 1959 (*SB* 2: 43); first breeding for West Stirling.

Great Spotted Woodpecker *Dendrocopos major.* Bred at Lochmore in 1953 (*SB* 2: 184); first breeding for West Sutherland.

Long-tailed Tit *Aegithalos caudatus.* "Has been confirmed as breeding in . . . Lochinver" (*SB* 2: 186); first breeding for West Sutherland. The first acceptable breeding record is in fact of a pair seen carrying food at Lochinver on 17th May 1960 (*SB* 2: 364).

Treecreeper *Certhia familiaris.* Pair nested in Stornoway Woods, May 1962 (*SB* 2: 93); first breeding for Outer Hebrides.

[Chiffchaff *Phylloscopus collybita.* The description of this species as "Summer visitor, breeds" in Stornoway Woods (*SB* 2: 95) has been qualified by the observer. Small numbers have been heard singing during the breeding season over the past seven years (though not in 1962), but actual proof of breeding has still to be established in the Outer Hebrides.].

Tree Sparrow *Passer montanus.* Nest with young, Loch Leven, 23rd June 1962 (*SB* 2: 213); first breeding for Kinross. Nesting colony found in a wood on Eday, 1962, (*BN* 30: 154); first breeding for Orkney. Two nests near Barrhead, 2nd August 1962 (*SB* 2: 263); first detailed record of breeding in Renfrew, although there is a previous general statement by Dr J. A. Gibson in a paper on "The Breeding Birds of Renfrewshire" (*Glasgow Bird Bulletin* 4: 32) that "I myself know of four nesting records since 1944, and there are probably other records." At least three pairs bred Fair Isle, 1961 (*FIBOB* 4: 190); first breeding for Fair Isle since 1936. At least ten pairs bred, Kergord, July 1961 *FIBOB* 4: 224); first breeding for Shetland since some time prior to 1937.

The following records have been held over for further consideration:

Pelican *Pelecanus* sp. (*SB* 1: 356).

Baikal Teal *Anas formosa* (*FIBOB* 2: 194), (*Bull. BOC* 78: 105).

Pectoral Sandpiper *Calidris melanotos.* (*BM* 2: 66).

Alpine Swift *Apus melba.* (*BM* 2: 203).

Siberian Stonechat *Saxicola torquata maura.* (*FIBOB* 4: 209).

NOTES FROM ISLAND ROAN, SUTHERLAND

IAN R. DOWNHILL

Introduction

The group of islands known collectively as Island Roan, or Eilean nan Ròn, lies on the north coast of Sutherland just east of the mouth of the Kyle of Tongue and separated from the mainland by a half mile of the turbulent Kyle Rannoch. Fifty miles to the north-east the Orkney Isles line the horizon, and with the Shetland Isles provide shelter from Scandinavia; but to the north and west the North Atlantic stretches away to Faroe, Iceland and Greenland.

The main island, Island Roan proper, measures just over a mile from corner to corner and varies in width from a half to three quarters of a mile, with a very indented coastline. The cliffs rise steeply to about 50 feet on the south side and 200 feet on the north-eastern corner, the highest point being Cnoc Loisgen at 247 feet. The rock is mainly conglomerate, overlain in parts by red sandstone and split by deep clefts on the northern side, some of which run right down to the sea. At the foot of the two northern headlands, shelves of rock emerge from beneath huge boulders, and slope away into the sea, and a similar but flat shelf is exposed at low tide round the south-east corner of the island. There are fine natural arches and sea caves but many are only accessible by boat; while the West Bay holds a number of small stacks. At low water spring tides, Island Roan is joined to the smaller Eilean Iosal—the Low Island—and both are separated by steep gorges from the tall stacks of An Innis and Meall Halm respectively.

Island Roan was inhabited for at least 125 years up to December 1938 when the last families moved to the mainland. Their eight stone-houses, along with the old schoolhouse have fallen into various states of disrepair, some of the parts being removed to the mainland for building there. Clustered round these houses are the remains of the old stone sheep and cattle pens. An account of the lives of these fishing people is given by one of the islanders, John Mackay, in *The Northern Times*. They lived mainly on the natural resources of the island, and the animal life must have undergone considerable changes since they left, almost all of which are unrecorded.

At one point a core of the island has "dropped out," leaving at one end a black peat pool—Am Mol-lochan—and opening to the sea at the other end by a natural arch. The small area round the pool shows a rich growth of vegetation and tall ferns and forms a good shelter for small passerines in windy weather. Most of the island top is given to heather moor dominated by ling, with the berried plants of crowberry and bearberry creeping through in the dryer parts. Bare stone patches give the island a somewhat arctic appearance on the more exposed slopes. The moor on the northern side is fairly hilly with marshy ground filling the hollows, and much of the water from here seeps into a muddy pool about 50 yards across and 12 to 18 inches deep, surrounded by clumps of *Juncus* and tall sedges. It drains over into Am Mol-lochan. The southern moor is flatter and wetter, there being little depth to the peat, and mosses and lichens grow amongst the sparser heather patches. Another somewhat shallower pond here drains over the southern cliffs and is much loved by the gulls for bathing.

Between the two moors lie the houses, and round them, running from west to east of the island, is an area of close-cropped grassland almost a quarter of a mile wide in one part. This was the area cultivated by the islanders, and it is intersected by numerous drainage ditches and a few dry stone walls, with spreading patches of *Juncus* and thistles. Another fairly extensive patch of very wet turf in the north-east corner of the island proved attractive to several species of wader. Areas of rather stunted bracken grow on the eastern cliff-edge, where the cliff vegetation itself is quite luxurious, owing, in part, to a series of springs, and to shelter from the prevailing winds. It is here too that dog rose, honeysuckle and a few sallow bushes give shelter to some of the smaller passerines.

The island derives its name from the seals which are numerous around it. Fisher (1952, p. 174) refers to "Eilean nan Ròn, the island of the grey seal, on which the grey seal does *not* breed" but this is assuredly incorrect, as it was well known to the islanders that the grey seal breeds regularly in the island's caves. About 120 ewes graze Roan, with others on Iosal, but there are no rabbits or rodents. One of the islanders told me that both had been released ("mice, rats and rabbits") but the experiment had failed. The only land mammals appear to be bats and otters.

I stayed on the island from 18th to 20th July 1959 and again from 3rd August to 13th September 1962, mainly to study autumn migration on the north coast of Sutherland. The birds of the island are little known, reflected in the fact that it receives only two mentions from Baxter and Rintoul (1953), and indeed the only up-to-date account of Sutherland birds is that given by Pennie (1962), dealing with changes in status over the past century. The paucity of published records, particularly of seabirds, led me to prepare a full list and to bring all the available information under the one heading.

Unpublished notes have been provided by F. J. Betteridge, who was resident on the island from 6th July to 30th September 1950, and by Dr I. D. Pennie who has paid some seven visits since May 1947 and provided helpful records of the breeding species. Except where they contribute to generalisations these are acknowledged in the list.

LIST OF SPECIES

Great Northern Diver. Single birds on 8th and 18th August, and 3rd September 1962.

Black-throated Diver. Two on 6th August 1962.

Red-throated Diver. On three dates in 1962 from 3rd to 17th August, but thereafter up to four to 12th September.

Storm Petrel. Nesting on the north and west, Cnoc Loisgen, and possibly the south. Though this colony was first recorded in 1884 (Harvie-Brown and Buckley 1887) it could be still spreading, as there are many available sites rond the houses. IDP found them on Iosal in 1949, and the colony there appears to be the larger.

Manx Shearwater. Westward passage observed in August and early September 1962, but numbers declining after mid August; highest count was 300 in an hour during a NW gale on 12th August. Details of shearwater passage have already been published (Downhill 1963), and these are some of the first records for Sutherland.

Great Shearwater. One on 10th August 1962, the first for Sutherland.

Sooty Shearwater. Westward passage in 1962, closer inshore than Manx Shearwater and on finer days, on 5th (10), 10th (6), 12th (6), 24th (1), 26th (3) and 27th August (3), 4th (1) and 9th September (1). First for Sutherland.

Fulmar. First appeared on Roan about 1929, though none on 18th June 1930. A good many on the west ledges in late May 1931, and about 30 sites there in June 1935 (Fisher 1952); nesting on the east side by 1948, with 96 sites in 1949. Of 143 chicks counted in 1962, 70 per cent were on the east. Iosal held 12 sites in 1949 and 14 in 1962, and there were seven on Meall Halm in 1949 (not counted 1962). A "blue" Fulmar was seen with westward passage of about 800 an hour on 10th August 1962.

Gannet. Fishing offshore June to September at least.

Cormorant. Colony on Meall Halm with 32 nests in 1959, and 40-50 in 1962. Sometimes visited by shooting parties (IDP).

Shag. Thirty-eight nests on Roan in 1962, but by late August there were up to 400 birds off the cliffs.

Heron. Single birds on 21st and 29th August, three on the 31st, and one on 11th September 1962.

Mallard. Two on 2nd September 1962.

Teal. Seven from the NE, 7th September 1962.

Pintail. Three on 18th and 19th July 1959.

Eider. First seen 1881, and breeding 1887 (Baxter and Rintoul 1953). Breeding also 1950, 1958 and 1962, but apparently irregular and never more than two or three pairs. Most of the adults seen probably come from the nearby Rabbit Islands.

Red-breasted Merganser. Seven on 10th July 1959, and two on 19th July 1962.

Barnacle Goose. Started wintering on the islands after the human population left, but not identified until January 1949, The only counts are of 300 on 28th March 1949 from the mainland, and 210 on 13th December 1955 (IDP). The unidentified geese seen by FJB on 12th and 13th September 1950 may have been of this species.

Buzzard. Nested 1950 (IDP); otherwise single birds on four dates in August and September 1947 and 1962.

Sparrowhawk. Ten birds on nine dates between 21st August and 11th September 1962, apparently coasting westwards.

Peregrine. Pairs present at least in 1950, 1955, and 1962 when a juvenile was also about. Said to breed by the local fishermen.

Merlin. One on 1st September 1950 and "seen subsequently" (FJB); also 25th August and 11th September 1962.

Kestrel. Single birds on seven dates, 5th August to 1st September in 1950 and 1962.

Red Grouse. In 1947 the gamekeeper at Tongue told IDP he found a single nest on Roan "some years ago."

Oystercatcher. About five pairs nest, but post-breeding flocks of up to 30 on the rocks in August.

Lapwing. A freshly dead adult on 19th August 1962 is the only record.

Ringed Plover. Two pairs present on 22nd May 1947 and noted again in June (IDP), but no proof of breeding. Heard flying over on 7th, 20th and 31st August 1962.

Grey Plover. Single birds flying SE on 6th and 11th September 1962.

Golden Plover. Up to four during the last ten days of September 1950 (FJB). Up to three on eight dates between 5th and 18th August 1962, and one on 29th. A second movement between 4th and 11th September resulted in up to three flying SE on six dates.

Turnstone. Up to two on the rocks in August 1962, and to 3rd September, but immigration in the last ten days of August brought the total to 20 on 20th, 16 on 24th and 8 on 30th.

Snipe. One pair bred 1959 and 1962. Five on 15th August 1962 were new.

Curlew. Less than ten post-breeding birds present in August and September; also recorded in December 1955 (IDP). Westward passage noted during the second half of August 1962, with maxima of 45 on 16th, 55 on 17th, and 32 on 23rd.

Whimbrel. One on 20th July 1959. Westward passage started on 16th August 1962 and was at a peak on 21st, 22nd and 23rd, with 27, 56 and 36 respectively. Mainly single birds thereafter to 10th September.

Bar-tailed Godwit. Two on 25th August 1962.

Redshank. Up to four most days in August and September; 32 on 4th, and 30 on 5th September 1962 were probably of Icelandic origin.

Spotted Redshank. One on 16th August 1962.

Greenshank. One on 3rd September 1962.

Knot. Present in fluctuating numbers from 18th August to 4th September 1962, with maxima of about 66 on 18th, 35 on 24th, and 40 on 25th August.

Dunlin. Single birds, 3rd to 5th, and 11th to 12th August 1962, with others on 13th, 19th, 20th (2) and 21st, and one on 8th September.

Great Skua. One seen on 19th July 1959; seen most days from 5th August to 12th September 1962, with numbers declining somewhat after eight on 17th August. For further details see Downhill (1963).

Arctic Skua. In August 1962 on 5th (3), 12th, 13th, 15th, 19th, 20th (2) and 31st. The last date coincided with the dispersal of the Kittiwake colony.

Great Black-backed Gull. Four or five pairs nest on Roan, but many more on Iosal.

Lesser Black-backed Gull. Recorded on 10th June 1947 (IDP), but not in 1950 (FJB). In 1959 a few pairs were nesting with the Herring Gulls on An Innis and a colony of about 50 pairs was established on the South Moor of Roan. Herring Gulls had joined this in 1962, when no Lesser Blackbacks were nesting on An Innis.

Herring Gull. Large well established colonies on Meall Halm and An Innis and a few scattered pairs on the cliffs of Roan and Iosal in 1959 and 1962 at least. A few pairs were with the Lesser Blackbacks on Roan in 1962 but not in 1959. After the dispersal of the colonies in late August 1962 a large roost formed on Iosal.

Common Gull. Up to seven most days, 3rd to 17th August 1962, with 17 on 16th. Thereafter on four dates to 11th September when there were seven.

Black-headed Gull. Five on 7th, and two on 21st August 1962, flying eastwards.

Kittiwake. Recorded nesting on the west side of Roan in 1947 and described as a fair sized colony in 1949, but by 1958 nesting only on one of the stacks in the West Bay (IDP). This stack held 95 nests in 1962, when there were also at least 18 nests on the side of An Innis facing the colony.

Common Tern. Seen August 1958 (IDP), but none nesting until 1962, when there were eight to ten scrapes on a small skerry off Iosal.

Arctic Tern. About 20 nests on a small skerry in 1947, and recorded since, in May 1950 and August 1958 (IDP). No terns nested in 1950 (FJB) or 1959.

Razorbill. Nesting recorded only in 1947, when a few pairs were on the NW side of Roan (IDP). Those seen on the sea during the breeding season are probably from the nearby Sgier an Oir. Westward passage was observed in early August 1962, with a maximum of 37 on 5th.

Guillemot. No breeding records, but present on the sea during the summer months. In 1962 seen during sea watches to 13th August with a maximum of ten on 5th August and two late ones on 4th September.

Black Guillemot. Nesting in cliff crevices round both Roan and Iosal, but no accurate count of sites.

Puffin. In August 1962 seen in large numbers to 12th, with about 90 on 5th, but after this on only four dates to 7th September.

Rock Dove. Nests on both Roan and Iosal. Maximum counts show about 20 birds in July 1959, and 12 in August 1962.

Short-eared Owl. Single birds on 15th August and 8th September 1962.

Swift. One on 27th August 1950 (FJB); two on 11th and one on 21st August 1962.

Skylark. Noted on most visits and presumably breeds. About 30 counted in August 1962.

Swallow. One on 29th August 1962.

Raven. Nested at least in 1947 and 1950 (IDP). Two usually about, but seven on 3rd August 1962.

Hooded Crow. Nested 1959 and 1962 at least. Variable numbers from mid August to mid September 1962, with a maximum of nine on 19th August; also seen in December 1955 (IDP).

Rook. About eight on 30th July 1950 (FJB); otherwise only in 1962, with one from 18th August to 6th September, one on 8th, four on 17th, one on 21st, and two on 29th August. All these were juveniles and presumably from the rookery at Tongue.

Wren. Noted in 1950 (FJB); and at least three with an unused nest on the east cliffs in 1962.

Mistle Thrush. Juvenile, 5th and 6th August 1962.

Song Thrush. One found dead, 18th September 1950 (FJB); one from 5th to 22nd August 1962, joined by another on 11th and 12th; single birds on 31st August, 4th, 9th and 11th September.

Ring Ousel. One on 21st August 1962.

Blackbird. Probably bred 1961 and 1962; pair and juvenile present on 3rd August 1962 and a 1961 nest found in one of the houses. These birds had all left by 10th September, but another juvenile was present on 22nd and 23rd August.

Wheatear. Seen in other summers, but the following details apply to 1962—about 60 present on 3rd August were the breeding population and progeny, and these all left between 18th August and 6th September; the second half of August saw passage of Iceland-type birds with about 20 on 23rd, and about 15 on 29th; most of those arriving in September were Greenland-type birds—almost daily in small numbers.

Robin. An adult and juvenile from 24th August to at least 30th September 1950 (FJB); a juvenile, 31st August 1962, and adults 1st to 3rd, and 5th to 7th September

Garden Warbler. One on 6th and 7th September 1962 was only the fifth for Sutherland.

Willow Warbler. One on 19th August 1962.

Meadow Pipit. Large breeding population never estimated. Passage difficult to detect but 10-20 very brown ones on the mornings of 24th to 26th August 1962 coincided with passage of White Wagtails.

Rock Pipit. Breeds, but no estimate of number of pairs.

Pied Wagtail. Pair in May and June 1947 (IDP). Two adults present on 3rd August 1962, left on 11th and 26th; single juveniles present on 5th and 11th.

White Wagtail. FJB records "pale wagtails" in the last ten days of September 1950, and in 1962 there was passage from the NW from 20th August to 6th September in small numbers, with a peak of eight on 26th August.

Starling. Breeds in the houses and on the cliffs. The island flock of 70 roosted on stacks in the West Bay in 1962.

Twite. Noted in other years, but in 1962 about 13 were about in August and at least one pair bred. Others sometimes came from the mainland to roost so that there were about 60 on 1st and 2nd September.

Redpoll. One flying south on 12th September 1962.

Reed Bunting. One on 18th July 1959.

Lapland Bunting. Three on 8th, seven on 9th, two on 10th, and one on 11th September 1962.

Snow Bunting. One on 30th September 1950 (FJB).

ACKNOWLEDGMENTS

I would like to thank both F. J. Betteridge and Dr Ian D. Pennie for providing their records, and particularly Dr Pennie for his helpful criticism of these notes.

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NOTES FROM THE BASS ROCK, 1962

J. B. NELSON

The rock was covered for migrants from 19th February to 11th October 1962. The birds seen are listed below, followed by a summary of the population of breeding sea-birds in 1962.

MIGRANTS AND VISITORS

Cormorant. A 1st year bird landed on the rock on 8th May. Though breeding on the Lamb nearby, Cormorants are rarely seen on the Bass.

Heron. Two on 31st August, and two 2nd September, flying up the Forth.

Mallard. Pair flushed from Top Loch on 9th and 16th April.

Common Scoter. Immature drake from 23rd to 28th April.

Eider. One pair bred. From about the third week of September numbers began to increase, from the odd bird to 15 drakes and 31 ducks on 5th October.

Peregrine. One flew low over the rock on 1st September.

Oystercatcher. Single birds and small parties frequently fly over high, but never settle.

Ringed Plover. One flying SE on 17th July.

Woodcock. One appeared on the rock on 17th April with strong NNE wind following ENE winds.

Curlew. Single birds flying over from 17th July to 7th September.

Common Sandpiper. One flew over on 20th April.

Redshank. Odd birds frequently about the rock. These and an occasional **Purple Sandpiper** are the only waders to settle.

Greenshank. One flew over on 14th July.

Great Skua. One flew round the rock on 31st August, two flew west on 2nd September, and one landed on the rock on 10th September; none showed any interest in Gannets.

Common Gull. Large movements of birds flying high with much calling, and heading NW, on 19th April; another movement in same direction on the 24th.

Black-headed Gull. At least two flying high on 7th October.

Sandwich Tern. Two flying south on 11th July. There is a curious dearth of terns in the vicinity of the Bass.

Great Spotted Woodpecker. Following mist and force 6 NE winds a juvenile arrived on 15th August, along with many other migrants. It tried to feed on the stems of the tree mallow.

Skylark. Small spring movement from 17th March to 19th April; and big autumn movement from 29th August, with many moving by 10th October.

Swallow. Many appeared low over the rock on 5th and 6th May, and passed straight on; also one on 24th May and 4th June, four on 25th September, and two on the 26th.

House Martin. One on 10th October with large fall of thrushes and other species following mist and force 4 to 5 east winds.

Carrion Crow. Two's and three's frequently visit the rock in spring and autumn; five on 3rd October.

Rook. Four circled over the rock on 28th April; autumn movement from 23rd September to 9th October, on which date several passed over in the mist.

Jackdaw. Two or three flew over on several dates at the end of September and beginning of October.

Blue Tit. One on 4th October.

Treecreeper. Following NE winds one was seen climbing on the chapel doorway on 13th July; it was a very bright bird, very pale underneath, and probably of the Northern race.

Fieldfare. One on 5th May; autumn movement began on 10th October, and there was an extremely large fall next day with thousands passing over, following mist and fresh NE winds.

Song Thrush. Constant passage between 17th March and 23rd April, with large fall of thrush species on 18th March; first autumn arrival on 1st September, two on the 29th, a few from 5th to 8th October, and large numbers from 9th to 11th.

Redwing. Two landed and others flew over on 18th April; spectacular start to autumn influx at dusk on 4th October, when a procession, mainly of single birds, flew low over the rock heading south, followed by several on 7th and 8th, many on 9th and 10th—on which day the rock was full of Redwings, with up to 30 in one patch of nettles a few feet square—and more than 1,000 flying past from before dawn until an hour after on the 11th.

Ring Ouzel. One on 11th October.

Blackbird. Two or three present continuously from 20th February to 17th March, a large fall on 18th March, and thereafter two or three to 9th May; then a gap until one arrived on 29th September, and large numbers with the other thrushes from 9th to 11th October.

Wheatear. One to three most days from 19th April until 16th May, with two large Greenland-type birds on 18th April; autumn passage from 15th August to 28th September, with maximum of six on 28th August.

Whinchat. One on 11th and 19th September.

Redstart. One on 18th April; three on 15th August, three from 26th to 29th September, one remaining until 2nd October, and at least two on 11th October.

Robin. One to three between 23rd February and 18th March; display and territorial fighting but no breeding. Huge rush began on 17th April with over 50 on the rock, many of them badly underweight, and several found dead later; all gone by the 24th: 44 ringed in two days and one later recovered in France. One on 15th August, one on 22nd September, two on the 26th, several on 10th October, and many on the 11th.

Sedge Warbler. One singing on 18th May.

Garden Warbler. One on 26th September.

Willow Warbler. One on 25th April, about six on 5th May following NNE wind, over 50 on the 6th, a very misty day, several each day until the 12th, and several more between 18th and 23rd; autumn movement began with one on 9th August, about six on 15th and 16th, single birds until the 26th, and several on many dates to 27th September.

Chiffchaff. One caught on 8th October.

Goldcrest. One on 14th April, five on the 18th, and single birds until the 25th; one on 20th September, several on the 26th, and a few to 6th October.

Spotted Flycatcher. One on 27th September.

Pied Flycatcher. About ten on 15th August, and one's and two's until 26th September.

Red-breasted Flycatcher. One on 26th September with mist and easterly winds.

Hedge Sparrow. Many migrating with the Robins from 18th to 20th April, and nine ringed, also underweight.

Meadow Pipit. Several moving through on dates between 2nd September and 8th October, and large numbers between 9th and 11th.

Yellow Wagtail. One on 23rd May, race not determined.

Starling. Apart from residents there were parties of 20 to 40 on several dates in spring and autumn; many arrived on 10th October.

Goldfinch. One on 24th April; five on 3rd October.

Siskin. Cock on 26th September, and one or two on 10th and 11th October.

Linnet. Small numbers regularly from 20th February to mid May; several on 8th September, over 30 on the 29th, and over 50 on 6th October.

Twite. Four flew over calling on 25th September.

Crossbill. Eleven from 8th to 11th July, one on the 13th, and two juveniles on 15th August.

Chaffinch. Two on 18th April, and one or two more until the 23rd; several with other migrants on 10th and 11th October.

Brambling. One on 18th April, and four on 19th and 20th; three on 8th October, and many on the 11th.

Lapland Bunting. One on 28th September and two on the 29th.

Snow Bunting. Two on 20th February.

BREEDING SEA-BIRDS

Fulmar. About 25 occupied sites, but not all permanent, and not all necessarily pairs.

Gannet (see Plate 17). Between 15,380 and 16,752 birds, in the categories indicated below. It should be noted that the possibility of the adult so-called non-breeders being in fact off-duty breeding birds has not yet been conclusively disproved, though it seems very unlikely.

	Pairs		**Single birds**	
	Min.	**Max.**	**Min.**	**Max.**
Breeding pairs	5353	5701		
Non-breeders with established sites	1337	1425		
Non-breeders without sites			2000	2500
	6690	7126	2000	2500

Shag. About 256 nests.

Lesser Black-backed Gull. About 18 to 20 pairs.

Herring Gull. A total of 515 was obtained by counting birds, without distinguishing members of pairs, and will therefore err on the high side as an estimate of breeding pairs. This count was made some time after laying had stopped, and as large numbers of eggs had been taken some birds may have left the breeding ground.

Kittiwake. About 1350 nests.

Razorbill. Estimated at a little under 100 pairs, but could be more.

Guillemot. At least 1165 birds—not nests—counted on 4th/5th June.

Puffin. Estimated at 50 pairs.

HANDA BIRD RESERVE, 1962

GEORGE WATERSTON

Handa has long been famous for its splendid breeding colonies of seabirds. Harvie-Brown, visiting the island in 1867, stated that he considered there were far more birds on Handa than at Hoy Head, the Bass Rock, and Ailsa Craig put together.

By agreement with the proprietors, the island is now managed as a Bird Reserve by the R.S.P.B., and work on the renovation of the derelict bothy, formerly occupied by a shepherd during lambing time, was completed last summer in time to house two school expeditions at the end of July and beginning of August (Plate 18). Victor Mendham and his wife were in charge of a party of girls and boys from Ackworth School, Pontefract, who spent a week on the island carrying out a general natural history survey from 27th July to 3rd August. A further survey was undertaken by a party from Forest Hill School, London, under the supervision of David Stanbury and Brian S. Brookes between 7th and 21st August. Both parties slept under canvas—using the bothy as a cookhouse/common-room and laboratory.

Roy H. Dennis made a census of the breeding birds on 6th and 7th June 1962 and reported as follows—Red-throated Diver, 1 pair; Fulmar, some 2000 pairs; Shag, 268 pairs; Eider, a few pairs; Shelduck, 3 pairs; Peregrine, 1 pair present but did not breed; Kestrel, 1 pair; Oystercatcher, 17 pairs; Lapwing, 1 pair; Ringed Plover, 2 pairs; Golden Plover, 2 to 3 pairs; Snipe, 8 to 12 pairs; Great Black-backed Gull, 33 to 35 pairs; Lesser Black-backed Gull, 2 pairs; Herring Gull, 284 pairs; Kittiwake, 7032 pairs; Arctic Tern, 3 pairs; Razorbill, 5340 pairs; Guillemot, 26,000 to 30,000 pairs; Black Guillemot, 4 pairs; Puffin, 393 pairs; Rock Dove, 2 pairs; Skylark, about 100 pairs; Raven, 1 pair; Hooded Crow, 3 or 4 pairs; Wren, 6 to 9 pairs; Wheatear, 35 to 50 pairs; Meadow Pipit, 100 to 150

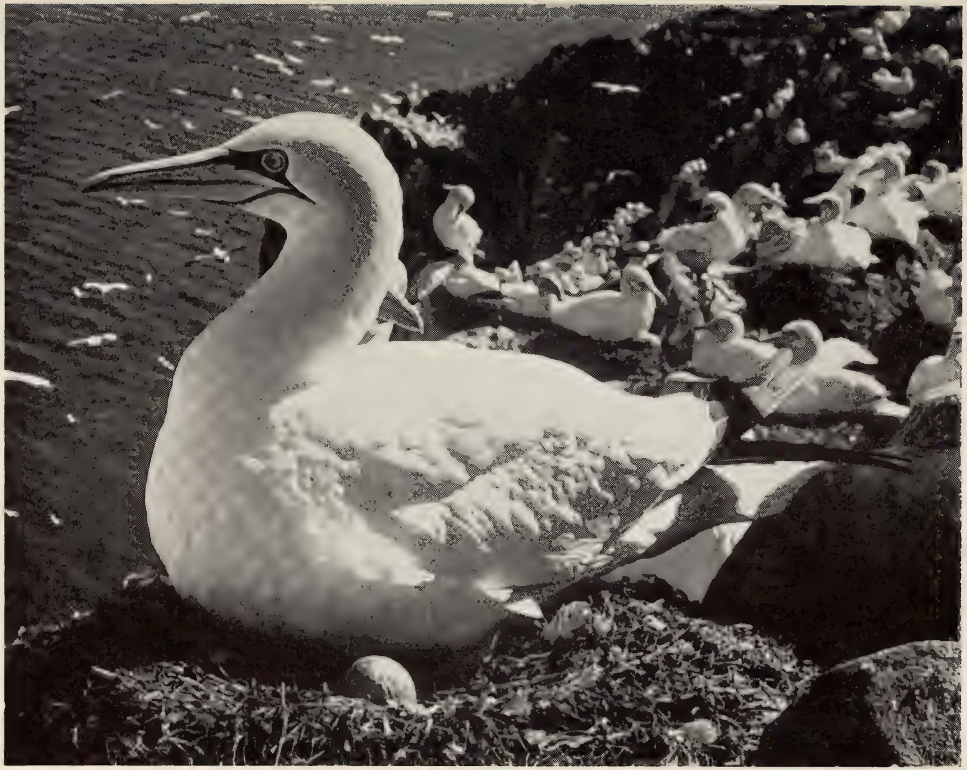
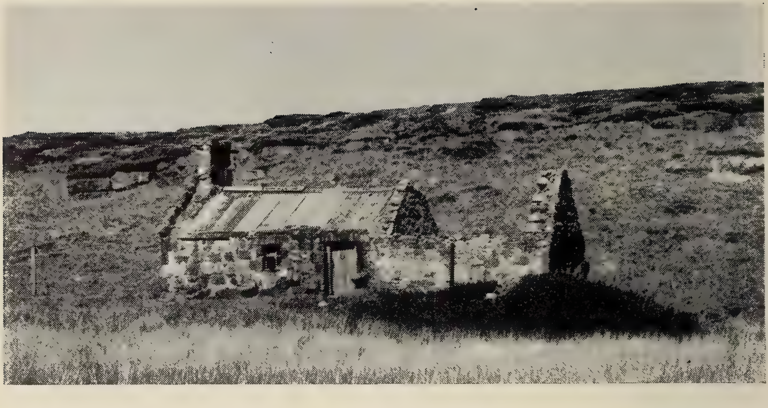


Plate 17. Gannet on the Bass Rock (see page 357) *Photograph by J. B. Nelson.*



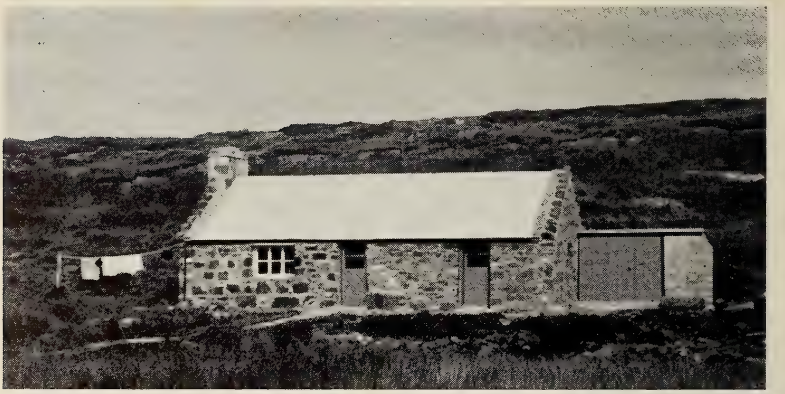


Plate 18. The **Helena Howden Bothy** on Handa Bird Reserve (see page 360)

Top: In 1960, before restoration.

Photograph by Alasdair Alpin MacGregor.

Bottom: July 1962, after restoration.

Photograph by George Waterston.

pairs; Rock Pipit, 30 to 40 pairs; Pied Wagtail, 1 pair; and Twite, 1 or 2 pairs.

The following breed in the vicinity and are frequently seen—Cormorant, Heron, Mallard, Golden Eagle, Buzzard, Merlin, Curlew, Redshank, Great and Arctic Skuas, Common Gull, Stonechat, Hedge Sparrow, and Starling.

Great Northern Diver, Grey Lag and Barnacle Geese, are regular winter visitors and passage migrants.

The bothy, which provides accommodation for up to eight people, is a two-roomed building fully furnished. It is a nice snug place with a big open-hearth fire burning peat and driftwood. It is an ideal base for organised school parties wishing to carry out field studies in natural history. Visiting naturalists are asked to keep a daily log of their observations on the island.

If you want to stay at the bothy, all you need to take with you are your own provisions, a sleeping bag, and a pillow slip; everything else is provided. Applications for bookings and a copy of the Prospectus should be made to the Scottish Office, R.S.P.B., 21 Regent Terrace, Edinburgh 7 (see advertisement pages for further details).

SHORT NOTES

FURTHER NOTES ON SOME SUTHERLAND RECORDS

Attention has been drawn to the fact that in my recent paper on the birds of Sutherland (*antea* 2: 167-192) reference was made to some records which had not in fact been published, and as some of these constitute "first records," notes on them are appended.

Barnacle Goose. This is the first definite record for North Sutherland. To be exact the birds were first identified as Barnacle Geese by me on 6th January 1949. Geese were known to have wintered annually on Island Roan for about ten years previously but had never been identified.

Great Skua. The record quoted is the first for West Sutherland. The earliest for North Sutherland to which allusion was made in my paper was one seen by Ian Downhill on Eilean Iosal on 19th July 1959, but I have since received a record of an adult seen over the moor about two miles east of Cape Wrath Lighthouse by D. I. M. and W. J. Wallace on 19th August 1954.

Great Spotted Woodpecker. The record of breeding at Lochmore in 1953 was received from the late Lt.-Col. Neilson who was factor to the Westminster Estates in Sutherland.

Jackdaw. My record of 24th July 1958 did not confirm breeding but I have subsequently received the following notes from Donald Banks, who was under-keeper at Ledmore in 1953 and 1954, and who kept a detailed diary of his observations: "19th February 1954, about 30 near Loch Urigill; 25th February 1954, large flock on Elphin crofts; 18th March 1954, have returned to nesting colony in the ivy on the cliff face above the Elphin crofts."

Long-tailed Tit. The Scourie record was of a family party seen at Loch a'Mhuillin by R. S. R. Fitter between 4th and 16th June 1951, and the earliest Lochinver record is of a family party seen beside Loch Culag by Miss Elizabeth Maugham between 29th June and 26th July 1956. I myself saw a pair carrying food at Lochinver on 17th May 1960 and a second pair the following day.

Goldcrest. The earliest record I have is 10th June 1954 when Goldcrests were heard singing in the Badaidh Darach Wood, Scourie, by D. G. Andrew and myself; a family party was seen by Professor M. F. M. Meiklejohn on 11th June 1955 in an isolated conifer wood south-east of Loch Stack. My first Lochinver record was on 18th May 1960.

Ian D. Pennie.

GLOSSY IBIS IN SOUTH-EAST SUTHERLAND

While I was working in the greenhouse at Cambusavie Hospital, The Mound, on 3rd December 1962 at about 1430 hrs, my attention was attracted by a large flock of Herring Gulls mobbing a bird in flight. Fortunately my binoculars were at hand, and during the time I had the flock under observation it passed within about 160 yards from where I was standing. The light was fairly good and during part of the time the flock was against a background of green fields. I obtained the following notes on the bird that was being mobbed:

> Plumage appeared jet black both above and below. This was noticeable as the bird twisted and turned away from the gulls. In appearance it was heron-like, with long legs and a long neck, but in flight it appeared to move much quicker than a heron. The most outstanding feature, however, was a long down-curved bill which appeared quite heavy. The wings were rounded. The overall wing span was similar to that of the Herring Gulls, but the bird's overall length was greater than that of the gulls.

I feel certain that the bird was a Glossy Ibis. When last seen it was heading towards the mud-flats of the Dornoch Firth about 4 miles distant. I telephoned D. Macdonald, Dornoch, who went out to the mud-flats that afternoon but failed to find the bird. The previous week the under-gamekeeper at Cambusmore Estate had seen in the Loch Fleet alder swamp a dark heron-like bird that he had not recognised. D. Macdonald and W. C. Wright spent the morning of 6th December searching this swamp without success, and Dr I. D. Pennie also kept a look-out on Loch Fleet but saw no sign of the bird.

D. Macdonald has drawn my attention to the fact that in at least one recent record of this species (*Brit. Birds* 46: 431) mention is made of the bird being mobbed by gulls (in this case Black-headed Gulls).

JAMES D. OLIVER.

(This is the first record for South-East Sutherland.—ED.)

WATER RAILS "SCAVENGING" IN OPEN

During the long spell of hard weather at the beginning of 1963 Water Rails were regularly to be seen at the municipal refuse tip outside Moffat, Dumfriesshire. This is separated from an area of adjoining moorland by a burn 4-5 yards wide which remained open when all the surrounding countryside was hard frozen, and this no doubt accounted for the concentration of these birds in the area. My first sight of the birds was on 25th January, when two were present, but I was told that up to four had been seen regularly during the previous fortnight. I counted at least six on the 26th, and smaller numbers were regularly to be seen until at least the beginning of March. So far as I can discover, this is the first time that Water Rails have been noticed at the tip.

Water Rails are normally so secretive that it was something of a surprise to find that these birds were showing themselves quite openly. On 25th January, for instance, I found one bird feeding on the tip while another stood preening amongst the bushes on the far side of the burn. Neither made any attempt to conceal intself when I approached and the feeding bird allowed me to watch it for ten minutes at a range of about 12 yards. On the following day all six birds were moving about freely in the open; although, during the temporary thaw that followed, the birds became progressively more wary and more ready to take cover whenever there was any disturbance. Two were last seen near the tip on 15th March.

The Water Rails were mostly content to feed along the edge of the burn, but on several occasions a single bird was seen feeding on the refuse tip itself. The main attraction was a sack containing the heads, feet and entrails of hens and pheasants. On closer examination I found that some of the fatty entrails had been pecked to some extent and that the bird had undoubtedly been feeding on these. On another occasion I was able to take a photograph (Plate 19) of a bird as it was pecking at the meat on a piece of ham-shank.

E. DICERBO.

(In this connection it is interesting to note two recent records (*Brit. Birds* 55: 132 and 56: 27) of Water Rails killing other birds and taking eggs.—Ed.).

WILSON'S PHALAROPE IN DUNBARTONSHIRE

On 30th August 1962 in the west bay at Ardmore I discovered a small sandpiper-shaped wader which I was unable to identify. It was watched for twenty minutes in bright sunshine with 13 x 60 binoculars at 250 yards range, and was seen to be slightly smaller than a Redshank, with bright white underparts, which first drew attention as it hurried along the shore; back very pale grey-brown; bill thin and completely straight. It did not fly but was always in a desperate hurry, moving about and feeding.

On the 31st it was closely examined for over half an hour with x40 telescope at 150 yards range. It was glimpsed briefly on 1st September by A. Gordon and T. D. H. Merrie before wildfowlers disturbed it, but could not be found on the 2nd and 3rd. Professor M. F. M. Meiklejohn later identified it from the detailed field notes as a Wilson's Phalarope, and the *British Birds* Rarity Records Committee has now accepted the record.

It was a very active walker and feeder. It would put its head down and charge along the mud amongst the scattered rocks on the shore, then feed at walking pace, energetically pecking at the mud or water, often with a quick short lateral movement of the bill. Occasionally it waded, but still moved quite fast in deep water.

At rest it had a dumpy sandpiper shape, in contrast to its slimmer lines while walking; the bill was held at a steeper angle than a Redshank's. When it stood beside four Redshanks it was smaller, though approaching their size; in shape it was generally similar, but much slighter, with a small rounded head. When the Redshanks flew it went with them, but flying much lower, only a few feet above the mud.

> General appearance very pale; forehead white; crown, nape and mantle grey-brown; wings uniform grey-brown above. much paler than a Greenshank's; rump and tail white, showing clearly when it drooped a wing while preening; end of tail not boldly marked, but could have been darkish as only seen briefly in flight; no wing bar or patch in flight, but white rump and tail then very obvious; eye-stripe dark; superciliary and lores white; cheek, throat, breast, sides of neck, belly and undertail coverts pure white; bill as long as or longer than head, completely straight, very thin, and black; legs yellowish-green.

This is the second Wilson's Phalarope to be recorded in Scotland, the first being in Fife from 11th September to 5th October 1954 (*Scot. Nat.* 1956: 2), and it is the first for Clyde and Dunbartonshire.

J. M. S. Arnott.

RADDE'S WARBLER AT THE ISLE OF MAY

8th October 1962 was a fine anticyclonic day at the Isle of May with the wind fairly settled in the east. The subsiding air gave us a cloudless sky and produced the kind of haar that bird-watchers delight in and light-keepers deplore. Yet despite these promising conditions there were few birds about —only a handful of Turdidae and a few warblers, and three Siskins to add interest to a dull morning. After midday interest was sustained with the capture of a Yellow-browed Warbler in the Bain Trap; and in mid-afternoon George L. A. Patrick and G. H. Acklam found another warbler, of a kind they had not seen before, in a nettle-bed on Ruff Green. It was shown to R. A. O. Hickling and later to me. Although I had only ten minutes or so with the bird, in failing light, I was confident both from previous experience in the field and from work I had recently done in the Bird-room at the British Museum (Natural History) that the bird was an example of Radde's Warbler (or Radde's Bush Warbler) *Phylloscopus schwarzi.* The following description of habits and plumage is compounded from the observations of RAOH, GLAP and GHA, as they had longer and better views than I had:

> The bird confined its activities mainly to the nettle-bed and an area of dense grass tussocks from 100-200 yards north of Dunvegan. It was under observation from 1500 hrs GMT till dusk at about 1730 hrs, and was watched for the most part in bright but diffused sunlight, at varying distances from 30 yards down to about 6 feet. Because of its habits, views were intermittent and usually brief, for the bird spent most of the time feeding briskly in thick cover, and was twice seen with a larva in its bill. Its behaviour was distinctive: it would creep quietly through the cover, showing itself momentarily at quite short distances without any sign of panic or nervousness, and occasionally would forsake the cover altogether and perch in open view on top of a grass tussock or rock. Once it hopped about on bare rocks, fully exposed, for several minutes (RAOH). It also perched on dead stalks and on the stick set up for a mist-net, adopting an upright attitude, and on one occasion it clung to a rock like a Swift. The bird was heard to call twice—on both occasions a soft, Blackbird-like *tchik, tchik* (GLAP). Attempts to catch it in a single-panel mist-net were made in vain, and it was while setting up the net for the second time at dusk that we finally lost contact.
>
> In size it was rather larger than a Chiffchaff in the same area, and altogether a more "solid" bird (GLAP). An impression was gained of a bird slightly larger than a Willow Warbler, which could have been due to its robust character—a sturdy, rather dumpy bird. The bill was stout and fairly short, much heavier than a Willow Warbler's (RAOH). Field-notes, compared later, were agreed on the uniformly dark olive-brown upperparts with slightly darker wings and tail; the absence of a wing-bar; the presence of a striking pale yellowish supercilium extending almost to the nape; and pale olive-grey underparts with brighter yellowish-buff or rufous-buff on the lower belly, vent and flanks. The sturdy legs were pale

and bright, near straw-flesh or brownish-flesh, and not dissimilar in colour from those of a Meadow Pipit.

During the short period in which I had the bird under observation it behaved exactly as described, coming out of cover occasionally to perch openly on dead thistle-plants or on the side of a tussock. Its actions, and indeed the whole "jizz" of the bird, were strongly reminiscent of a Radde's Warbler I had watched for an hour or so following its release at Blakeney Point, Norfolk, on 4th October 1961. The robust build, short thick bill, stout brightly-coloured tarsi, and the intensity of yellowish-buff on the lower belly and flanks were all characteristic of this species as I knew it from that occasion and from my examination of skins gathered together from a number of museums when preparing my field guide *Identification for Ringers, No. 2—The Genus Phylloscopus.*

The bird was seen fleetingly by GLAP and GHA on 9th and 10th October. This constitutes the first record for Scotland and the fourth for the British Isles. In autumn 1962 it was preceded in western Europe by examples at Ottenby Fagelstation, Oland, Sweden, on 25th September, and at Dungeness Bird Observatory, Kent, where one which was trapped and ringed remained from 3rd to 8th October. The Swedish bird (a male) was collected, and I later saw the mounted specimen at the British Museum. Its plumage characteristics were very similar to those of our own bird—which, judging by the amount and intensity of yellowish-buff underneath, may well have been a young bird, though in this respect Radde's Warbler appears to be variable. The bird breeds in south-east Siberia and Manchuria, migrating through eastern and central China to winter quarters in the Indo-Chinese countries.

Although this species is referred to in *The Handbook of British Birds* (2: 26) as a "Bush-Warbler", this expression was used to identify the species with the monotypic genus *Herbivocula* Swinhoe 1871. Ticehurst (*The Genus Phylloscopus,* 1938, page 96) placed *Herbivocula* in the synonymy of *Phylloscopus* Boie 1826, thus effectively making this species a "leaf-warbler." All subsequent workers have accepted Ticehurst's action and the bird is best referred to simply as Radde's Warbler.

KENNETH WILLIAMSON.

WITHOUT COMMENT

Removed from an ill-hidden nest of a pair of Blackbirds in a hedge at Gullane, a rather obvious slip of paper about 4 inches long bearing in large red capitals the injunction—IN THE EVENT OF DAMAGE KINDLY ADVISE US IMMEDIATELY AND RETAIN ENTIRE PACKING FOR INSPECTION.

WINIFRED U. FLOWER.

CURRENT NOTES

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Unless otherwise stated, January to April dates refer to 1963 and all others to 1962).

Introduction

In view of the exceptional severity of the past winter, we are devoting a section of Current Notes to some general remarks on the subject. Other distributional notes follow as usual, in scientific order, with those prior to 7th October 1962 given separately except where relevant to current observations. Data on the arrival of summer visitors have been held over.

Effects of the severe weather

With most of the country in the grip of prolonged hard frost and snow blizzards for two months or more from Christmas 1962, the past winter was one of exceptional severity. Insofar as weather is of prime importance to all birds, many records given in the *Distribution* section under species will also be relevant to a full study of the subject, but the present section has been confined to some of the more obvious effects, and is based on the notes of a limited number of observers.

One well known result of hard weather is to drive birds to the coast. In Moray Basin and the northern counties, most lochs, and even the sea, froze on many days in January.

Wildfowl moved to the sea in the first few days of the severe cold, but disappeared from the area when the sea froze; **geese** and **swans** were very scarce; **waders** remained in much the same numbers as usual, but **Oystercatchers** seemed worse off than the rest, and several were found dead by 9th January; many **thrushes**, especially **Redwings**, and **finches** died in the east, but were still plentiful in the west, which escaped the deep snow at this time (RHD).

From the beginning of January and throughout February, exceptional numbers of ducks resorted to the Clyde between Cardross and Dumbarton. In place of the usual 100/200 **Tufted Duck** found in frosty weather, up to 2,000 frequented the mouth of the River Leven and the adjoining mudflats, together with **Pochard, Goldeneye** and a few **Scaup**. Instead of three or four **Red-breasted Mergansers** feeding in the Leven there were frequently 30/40 this winter, and about 100 **Teal** which winter on Carman Reservoir were seen on the Clyde—as on 23rd February. For several days there were also 16 **Coot** (ERB).

Tufted Duck on tidal water were noted at many places, including large numbers in the Tay at Stannergate, Dundee (600 on 16th February) and Invergowrie Bay (170 on 21st February) (HB). **Pochard** were reported at Stannergate (up to 32 on 14th and 16th February) (HB), and Dalmeny, West Lothian (25 on 9th February) (TCS). **Coot** were noted on the sea at Ardersier, Inverness (20 on 10th January) (RHD), and at Tyninghame, East Lothian (9 on 30th December, and 19 on 13th January) (RWJS).

Inland, naturally, **wildfowl** tended to disappear. The first blizzards of the winter in mid November scattered the **geese** in all directions from Libberton, Lanarkshire (RE-H). By no means all the wildfowl left, however, and even at the height of the cold spell some **Tufted Duck** and **Pochard** remained inland in Kirkcudbrightshire, where on 21st February a pair of Tufted and a duck Pochard were diving in a narrow ditch in Carlingwark marsh (ADW). At Headshaw Loch, Selkirkshire, on 17th February, despite the loch being frozen and covered with 18 in. of snow, 95 **Mallard** remained; they fed on fodder put out for the hill cattle and sheep, which also supported other species such as **Rooks**, **finches** and **buntings** in the area (JB). Whilst other diving birds moved in great numbers to the coast, **Coot** merely migrate to fields of stubble and grass by the frozen lochs and feed there if possible. Large numbers (over 400 on 15th January) remained by Loch Ken and the River Dee (ADW), and flocks of 50 and 80 were seen at Loch Lomond on 16th February and 3rd March (TDHM).

In the Forth, up to 1,000 **gulls** are usual at low tide between Burntisland and Kinghorn, but on 13th and 20th January there were 10 or 20 times as many—with three-quarters of them **Common Gulls**, usually rather uncommon there (GHB). Exceptional numbers of **waders** and gulls were noted also in February (MSB). At various places **Golden Plovers** were below high tide mark, and one found dead near Dirleton on 3rd January was just skin and bone. Hundreds of **Redwings** at Tyninghame on 13th January were obviously in bad shape and some were lurking just inside rabbit burrows; they had all disappeared two weeks later. On the 13th also there were 20 **Blackbirds** on as many yards of beach rubbish, and dozens of **Song Thrushes** on the dunes and feeding on the mud beside the Dunlin (RWJS).

All along the shore of the Clyde near Dumbarton there were hedgerow birds feeding on the tide wrack, especially **Blackbirds, Song Thrushes, Robins** and **Hedge Sparrows**, the Blackbirds being particularly numerous with one every few yards (TDHM). Very large numbers of **Lapwings** also fed on this shore, and **Redwings** and **Fieldfares** were noted (ERB). **Lapwings** were reported starving on the Fife coast, with 10 dead ones near Culross (GD, JP), and **Woodcock** were seen on or near the shore in several places (GWGB, MFMM, RWJS).

Observers commented on distressing numbers of dead birds along the shores of the Forth. On 9th February at Dalmeny these comprised **Red-throated Diver, Scaup, Common Scoter, Shelduck, Oystercatcher, Knot, Common** and **Black-headed Gulls, Razorbill, Guillemot**, and many **Woodpigeons**; some of the seabirds may have died of oiling, but the Guillemot was quite unmarked (TCS). Two miles of shore from Burntisland to Kinghorn and at Kirkcaldy on 17th March revealed **Black-throated Diver** (1), **Great Crested** (1) and **Little** (1) **Grebes, Gannet** (1), **Shag** (4), **Common Scoter** (2), **Eider** (3), **Lapwing** (1), **Redshank** (1), **Herring** (10) and **Black-headed** (2) **Gulls, Kittiwake** (1), **Razorbill** (1), **Guillemot** (12), **feral pigeons** (6), and **Blackbird** (1); though the condition of some of the corpses made it impossible to tell whether the birds had been oiled, there was only one—a Guillemot—which definitely had been, and the observer concluded that most of them probably died of starvation or exposure (GHB). On the other hand, the majority of birds found dead between North Berwick and Gullane on 10th February, except for the waders, were oiled—**Great Northern** (1) and **Red-throated** (2) **Divers, Red-necked Grebe** (1), **Fulmar** (2), **Mallard** (1), **Pintail** (1), **Scaup** (1), **Velvet Scoter** (1), **Common Scoter** (16), **Eider** (3), **Pink-footed Goose** (1), **Oystercatcher** (3), **Curlew** (5), **Redshank** (several), **gulls** (several), **Razorbill** (6) and **Guillemot** (33) (TB). Near Lochgilphead, Argyll, large numbers of ducks and other birds have been picked up dead; some of the corpses were taken to a local vet, who reported that the deaths were due to starvation (IR).

Redwings appeared in town as usual in hard weather; they were reported from many parts of Edinburgh and elsewhere, but moved out again as soon as the cold spell ended. Severe weather bears heavily on this species, and in Dornoch, Sutherland, 57 dead birds were picked up, mostly under cotoneasters in the local gardens, and the majority seem to have died on 11th and 12th January, the first days of really intense frost. The wings of 14 of them measured 113/118 mm, indicating the Continental race. Four **Fieldfares** also died (DM), but this species is less frequent in town, though in central Edinburgh one arrived in George Square about 1st February (TCS).

There were the usual oddities. In Edinburgh, a **Woodcock** appeared in Belgrave Crescent gardens on 24th January (GWCS per DGA), and in the early morning three days later a **Moorhen** was flushed from the gutter in Ainslie Place (JADH in *The Scotsman*); both places are within half a mile of the West End. A **Coot** appeared one day in February at the door of a house in Dalry, Kirkcudbrightshire (ADW). Back in Edinburgh in January **Redwings** ate all the berries off a cotoneaster in St John's Road and then turned their attention to the berried branches in a vase in the vestibule (MCF in *The Scotsman*), and on 14th January a really filthy **Pied Wagtail** was picking about on the pavement at the busy and heavily built-up junction of Leith Street and Picardy Place (ATM).

In Caithness, February was cold but the snow had gone by the end of the first week. Of birds common there at this time of year, **Lapwing, Fieldfare, Redwing, Greenfinch** and **Snow Bunting** were conspicuously absent, and numbers of waders and duck also seemed low (DMS). Near West Calder, Midlothian, **Song Thrushes** were noticeably absent, as in 1946/47 (HH). Near Walkerburn, Peebles-shire, small birds moved out, and dead ones were not found. Many **Robins** and **Hedge Sparrows** normally leave the area in winter, but they are slow to return this year, and **Wrens** and **Treecreepers** seem hard hit, though it is too early to be sure about other species (JB).

In general, however, reports which we have been sent about the survival of small passerines are less discouraging than one might expect. On another page details are given of two **Blackcaps** passing the winter comfortably at a bird table in Morayshire (AP). Even vulnerable birds like **tits** and **Chaffinches** have remained as frequent as usual in the Meadows in Edinburgh, and presumably scraps put out by householders were enough for them (TCS).

At Fair Isle, residents such as **Wrens** and **Rock Pipits** suffered little, and singing **Skylarks** are very abundant, though it was in fact not an exceptionally bad winter on the island (PED).

A preliminary survey of 200 acres in Fife when the better weather came suggests that numbers there may not be down as much as was feared (GD, JP). In the Lothians there are many reports of small birds such as **Long-tailed Tits, Treecreepers** and **Goldcrests**, so that it seems that there has been much less damage than in 1946/47 (RWJS). In woods near Gifford, East Lothian, there is likewise no evidence of disaster; **Great Spotted Woodpeckers, Coal Tits, Treecreepers, Robins, Goldcrests, Hedge Sparrows** and **Crossbills** were there before and are still there, and only the **Woodpigeons** seemed obviously fewer between 1st December and 2nd and 31st March (TCS). It will be very interesting to see whether these encouraging reports are reflected in the breeding populations of resident birds this summer.

Distribution

As already indicated, this section excludes observations made before 7th October 1962, so that in general it deals with winter records and virtually not at all with autumn migration.

Two **Great Northern Divers** at Loch Lomond on 2nd September have already been noted (*antea* 2: 253); subsequently there were two there on 7th October, one on 4th November and one on 16th February (AGG, TDHM). On 29th January one was at Balcary Point, Kirkcudbrightshire, a county where they are seldom noted (AFA). A dead **Red-throated Diver** was picked up below roadside wires at Heriot, Midlothian, on 7th February (JS per GW), and other inland records are of single birds at Duddingston, Edinburgh, on 11th February (DRA), at the head of Loch Ken on 9th March (ADW), and of a dead and oiled bird at Loch Leven, Kinross-shire, on the 30th (TB, RWJS).

An oiled **Red-necked Grebe** was found at Earlsferry, Fife, on 30th January (PGB), and one was at Gullane Point, East Lothian, on 23rd February (CT), while inland there were single birds at Tarbet, Loch Lomond, Dunbartonshire, from 11th to 21st February (TN), Loch Earn, Perthshire, on 17th March (PGB), and Lindores Loch, Fife, on 3rd April (HB).

On 2nd January two **Shags** were right up at the head of Loch Ailort, Inverness-shire (RHD).

A **Bittern** in Lewis early in November has already been noted (*antea* 2: 312), and one in Dumfriesshire on 29th August is recorded in the section on *Earlier observations* in this number of *Scottish Birds*. Three others are reported: on 6th January an exhausted bird was picked up on a cliff path near the wireless station at Portpatrick, Wigtownshire, and it died next day (JKC); another was present from late January at Dougalston Loch, Milngavie, Dunbartonshire, and was caught in an exhausted condition on 24th February (RSB, CEP); and on 11th March just south of Langholm, Dumfriesshire, one was watched at five yards range from a car as it walked slowly across the road by the river and, becoming slightly alarmed, pointed its head and beak straight up in the air (DSc per MIW).

At least 50 **Gadwall** were counted at Loch Leven on 16th September. In areas where they are less numerous there was one at Loch Lomond on 9th December and a pair on 2nd January (AGG, TDHM), and again on 31st March nearby (DSt), and a duck at the mouth of the River Stinchar, Ayrshire, on 2nd February (MFMM).

On 23rd March big numbers of diving ducks were seen off Aberlady Point; there were thousands of **Common Scoter**, hundreds of **Velvet Scoter**, about 250 **Scaup**, and about 100 **Long-tailed Ducks**; between 1520 hrs and 1620 hrs, parties of 45, 70 and 10 Scaup were watched out of sight as they left to the north (RWJS). Six days earlier at Gullane Point quite unprecedented numbers of Common Scoter were present; there were hundreds of ducks far out at sea at 1330 hrs but, even with 16 x 50 binoculars, only the nearest could be identified. At 1400 hrs small groups began to take wing, and for the next ten minutes they seemed to be flying in all directions, until they were gone. All that could be identified were Common Scoter; there were at least 5,000 and probably nearer 20,000 compared with maximum numbers on spring passage of 2,000 recorded by Hamilton & Macgregor (*The Birds of Aberlady Bay Nature Reserve*) (MKH). On 14th January in Grangemouth Bay 260 **Scaup** were unusually many for so far up the Forth (GD, JP). Numbers of **Pochard** again reached a high level at Duddingston, with 2,500 tightly packed round a pool of open water on 6th February, some 500 fewer than in the last week of January 1962 (*antea* 2: 46) (DRA). At Stannergate, Dundee, the peak count of **Goldeneye** was over 600 on 26th January, with drakes outnumbering the ducks four to one (HB). Over 60 **Long-tailed Ducks** were counted at Nairn on 12th February (RHD), but on the west coast they are scarcer, and a pair at Lendalfoot, Ayrshire, on 2nd February was the observer's first in the Firth of Clyde (MFMM); an adult drake was found dead at Ardmore Point, Dunbartonshire, in the early spring (WUF). A drake **Common Scoter** was found dead on the railway in the middle of Dunfermline, Fife, on 11th March (GD, JP).

About 400 **Red-breasted Mergansers** flew down the Clyde past Ardmore Point, Dunbartonshire, half an hour after high tide on 3rd November; similar numbers have apparently been seen previously just after high tide (TDHM); 67 off Broughty Castle, Angus, on 10th January was the largest party in the

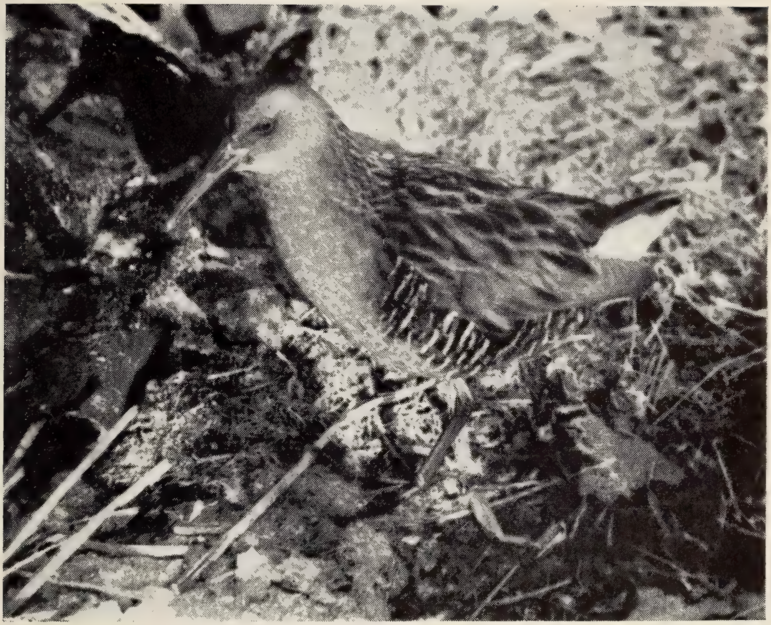

PLATE 19. WATER RAIL at Moffat refuse tip. Near the bottom of the left side of the picture can be seen the open end of the ham-shank on which the bird was feeding (see page 365).

Photograph by E. Dicerbo.

area for some years (HB). In addition to those already recorded (*antea* 2: 313) a surprising number of **Smews** are reported.

East Voe of Scalloway, Shetland—red-head on 1st January (BH).

Craigs Pool, South Esk, Angus—red-head on 24th January, and drake on the 27th (GMC per HB).

Forfar Loch—drake on 9th March (HB).

Stannergate, Dundee—red-head on 26th March (HB).

Rescobie, Angus—pair on 23rd March and 2nd April (GMC per HB).

Longannet, Fife—red-head on 26th January (GD, JP).

Cult Ness, Fife—drake on 11th February (GD, JP).

Tyninghame, East Lothian—red-head above bridge in village on 13th January (RWJS).

Near Kelso, Roxburgh—red-head on the Tweed on 2nd February (AJP).

Mouth of River Leven, Dunbarton—red-head from 9th to 16th February, two on 3rd March, and pair on 25th February (ERB, TDHM).

Castle Semple Loch, Renfrew—red-head on 17th February (RGC), and 6th March (RAJ).

Bothwell Bridge, Lanark—red-head and two drakes, one of which eventually drove the other away, on 17th February (DSt).

Loch Ken and River Dee, Kirkcudbright—at least two red-heads and two drakes between 6th January and 2nd March (AFA, JKRM, ADW).

An exceptional count of 169 **Shelduck** in the Montrose Basin was made on 23rd February (HB). Inland, one was at Castle Loch, Lochmaben, Dumfriesshire, on 11th November (RTS), and two were at Weird Loch, Sanquhar, Dumfriesshire, 25 or 30 miles from the sea, on 23rd December, but gone next day (DJL).

In the Threave/Castle Douglas area numbers of **Grey Lag Geese** were high for most of the winter, but quite exceptional during the coldest weather, with rough estimates of 3,000 on 15th January, and 5,000 on 1st March. The Loch Ken flocks of **White-fronted Geese** numbered at least 530 Greenland birds at their peak in mid November (ADW). Small numbers of Whitefronts are usually seen in the early spring in Caithness near Loch Hielan; on 3rd February there were 19 at Greenland, and on 17th March seven at Hielan and ten at Brubster, where three were seen on the 23rd (JG, KG, DMS). At Gartocharn, Loch Lomond, one Whitefront was seen on 8th December, and up to six in January. Fourteen **Bean Geese** were in the same area on 13th January, and 17 on 9th February (AGG, TDHM). A single Bean Goose was shot from a flock of 28 similar geese at Cruden Bay, Aberdeenshire, on 19th January, and the skin sent to Culterty Field Station; these birds kept apart from Pinkfeet and Grey Lag, and returned to the Slains area (AMi per GMD, CMY); at dusk on the 24th a flock of 200 geese was located in the same area, half of them Pinkfeet and the others almost certainly Bean Geese, though the light was very poor (EAG). The first Bean Geese in Kirkcudbrightshire were two seen on 22nd November, but most arrived in late December to give a maximum of about 150 birds, which were still there on 16th March but not located on the 24th (ADW). A "blue" **Lesser Snow Goose** returned to Libberton, Lanarkshire, on 20th October, but the large white one has not been seen this winter (RE-H).

A **Light-breasted Brent Goose** was seen with Grey Lags at Drumburn, Kirkcudbrightshire, on 20th January (WA, AB, DSk, JGY), and other Light-breasted birds were two in the Eden Estuary, Fife, on 29th January (PGB) and 10th February (CT), and six at Tyninghame on 17th March (TB, RWJS); in Aberdeenshire 13 Brents were seen in flight at Newburgh on 9th February (AGM). A large flock of **Barnacle Geese** was heard flying south over Lockerbie at 10.45 p.m. on 12th October, and subsequent counts of the flock on the Solway gave totals of about 2,000 on 18th November, and 1,842 on 16th December (RTS). Two were at Kirkoswald, Ayrshire, on 10th January (GAR), and one was with Pinkfeet at Libberton, Lanarkshire, on the 22nd (RE-H).

The status of the **Canada Goose** in many places remains obscure. At Rowbank Reservoir, Renfrewshire/Ayrshire, a pair of colour-ringed birds, at least one of which still remains, was introduced some years ago. Numbers have increased from 10 in 1960/61 and 18 in 1961/62, so that this winter 28 were counted there on 13th January, and 15 (probably the same birds) at Barr Loch, two miles away, where the observer had not seen them before in three years watching. The birds breed wild at Rowbank, but the flock is present at all seasons, except for occasional sorties; they do not allow one to approach much nearer than 50 yards before taking flight (RGC). On 11th November one was flying towards Loch Lomond near Gartocharn (MQS), and on 24th March there was one at Gladhouse, Midlothian (RWJS).

The large winter population of **Whooper Swans** along the Clackmannan shores of the Forth has been noted in the past (*antea* 2: 104). Further up the river, on 2nd February, at least 123 were counted in various groups along the banks between Stirling and Blackdub, 2½ miles along the Doune road (BEW), and on the 16th there were 252 on 350 yards of the Forth by Cambuskenneth, near Stirling (PC). There are more reports than usual of **Bewick's Swans**, all from the southern half of Scotland:

Yarrowfeus, Selkirk—8 adults flew off from melt water in a field, and landed by St Mary's Loch, on 17th March, apparently the first recorded in the county this century (AJS).

Ross Priory, Loch Lomond, Dunbarton—2 on 16th January and 16th February (TDHM).

Hamilton Low Parks, Lanark—2 on 30th March (DSt), and 3 on 8th April (AFP).

Near Maybole, Ayr—2 on 29th and 30th January (GH-O).

River Dee near Castle Douglas, Kirkcudbright—5 adults on 13th January (JGY).

Between Dalry and Ken Bridge, Kirkcudbright—6 adults on 16th March (GAR) and again next day (ADW).

A **Peregrine** was seen over Kelvin Bridge goods yard in Glasgow on 29th November (MQS).

A cock **Capercaillie** was found in a garden on the outskirts of Stirling on 17th December, and died later though it showed no external sign of injury (GTJ). A hen Capercaillie on some waste ground near Moffat, Dumfriesshire, on 6th March had been seen a week earlier by some quarry workers (ED); two cocks are reported to have been shot 3 miles south of Moffat about 5 years ago, and another was seen in Craigieburn Forest, Moffat Water, by a visitor on 25th March 1963 (per ED).

A Short Note on another page refers to **Water Rails** coming boldly into the open at Moffat. There are similar reports from elsewhere, which may well be related to the cold weather: at Stracathro Hospital, Angus, one was standing unconcernedly in a shallow pool on 2nd February (GMC); on the same day, at Caerlaverock, Dumfriesshire, one walked across the track and disappeared under a hen coop (AGG, AI, TDHM); on 9th February in Edinburgh one was caught at the side of a burn just outside the Hermitage of Braid (OTT); and on 3rd March one was mincing across the ice of the pool at Belhaven rubbish tip near Dunbar, East Lothian (MFMM). On 26th and 28th December a small brown crake, much smaller than a Water Rail, and with a red spot at the base of its bill, was seen at Duddingston Loch, Edinburgh. It was very similar to the bird seen there by the same observer in November 1952 (see *antea* 1: 406, 474, and *Edin. Bird Bull.* 3: 19), but unfortunately, as before, the views obtained were not sufficient to establish it with certainty as a **Little Crake** (DRA). On 23rd February there were no fewer than 58 Moorhens assembled in an ice-free burn at Lockerbie, Dumfriesshire (RTS).

Since **Lapwings** left Caithness in the cold weather, their reappearance in mid March was very striking, the first big flock being over 200 birds at St John's Loch on the 17th, although there had been three at Dounreay on the 7th, and 18 at Castletown on the 10th (KG, DMS). Fair Isle had a good fall of migrants, including Lapwings, on the 12th, and there were up to 500 of them on several days. Few seem to have been local birds as only three or four had taken up territories by the end of the month, but such numbers have seldom been recorded there before (PED).

Winter records of single **Green Sandpipers** are of birds near Gourock, Renfrewshire, on 26th January (MQS), near Bilston, Midlothian, on 3rd and 17th February (DD), and in a flooded field near Dumfries on 10th March (WA). A **Spotted Redshank** was at Powfoot, Annan, Dumfriesshire, on 4th and 5th March (RTS, DSw, AFGW), and a winter **Greenshank** was on the foreshore at Fairlie, Ayrshire, from 16th to 23rd January (ETV).

At Carsethorn, Kirkcudbrightshire, there were well over 10,000 **Knot** on 2nd February (AGG, AI, TDHM); 400 north of Girvan next day were unusually many for Clyde (MFMM); and 1,300 at Seafield, Leith, on 17th March was unprecedented at that particular locality (ATM). Inland, one was seen on a flooded sandy ploughed field at Loch Leven on 30th March (RWJS). Three **Dunlin** by the Tweed between Walkerburn and Innerleithen, Peeblesshire, on 24th December were odd in both date and place (JB).

Two **Ruff** were at Aberlady, East Lothian, on 23rd February (CT), and one was still present at Prestwick (see *antea* 2: 317) on 3rd March (GAR).

A very large assembly of over 650 **Great Black-backed Gulls** was feeding on abattoir offal at Dornock, near Eastriggs, Dumfriesshire, on 30th December (RTS). Mature or nearly adult **Glaucous Gulls** are reported near Gourock, Renfrewshire, on 26th January (MQS), and at Ayr on 24th February (MFMM) and 16th March (RGC), but the first at Stornoway, a 1st winter bird, was not seen this winter until 10th March, an unusually late first date. Not one **Iceland Gull** appeared in Stornoway this winter, which is unusual (WAJC), but a 1st winter bird was seen at Lentran, Inverness, on 9th January (RHD).

Single **Little Auks** were found dead at Reay, Caithness, on 2nd and 12th December (JG), and there were fresh remains of one at Aberlady on 27th January (JO). On 22nd March there were already many **Puffins** on the sea south of Boddam, Aberdeenshire, and about a dozen on the cliffs, one of them actually emerging from a hole. This seems exceptionally early, since Baxter & Rintoul (*The Birds of Scotland*) state that they do not land until the second half of April or early May, and R. M. Lockley gives a series of arrival dates at Skokholm, far to the south, from 1928 to 1952, of which the earliest was 22nd March 1932, and the first landing was not until 4th April (DPW).

On 13th January there was a huge migration of **Woodpigeons** at Dunbar, East Lothian. It was said to have started at first light at 0830 hrs, and while the observer watched from 1015 hrs to 1145 hrs the birds were estimated to be passing at about 500 per minute in an almost continuous stream, equal to 45,000 in those 90 minutes. They came off the sea from E or SE, heading into the strong NW wind, and hitting the coast just south of Dunbar. They flew northward under the cliffs and a few turned west up the Tyne, but most continued northwards. The birds may have come in a direct line from St Abbs Head, rather than over the North Sea, since the movement was clearly a northward one at Dunbar (MFMM). On the same day flocks were noted from Port Seton to Whitekirk, along the East Lothian shore, passing westward up the coast, and crowding every turnip field along the A1 in the evening (TCS).

Collared Doves were absent from Stornoway, Lewis, for a few months but one or two pairs returned to their usual haunts in the second half of March (WAJC). This same midwinter absence was noted from Edmonstone, Edinburgh, where none was seen from 10th December until 23rd February, but up to seven in March (GWGB).

A **Barn Owl** was seen about Kinnaird Park, Brechin, Angus, during March (JDu per HB); one of two was still at Longannet, Fife, on 21st January (GD, JP); one was flushed from farm buildings near Broxburn, West Lothian, on 22nd January (per JB); one was hunting by day at Bush Estate, Midlothian, on 6th January (DD); a weak sickly bird came to a steading at Makerston, Roxburghshire, on 13th January and died next day, but another was hunting there on the 21st (AJP). Rubbing in the superiority of the Solway for Barn Owls, are comments that two or three may always be seen now by the road from Dalry to Castle Douglas (ADW), and that three were noted on 12th February between Castle Douglas and Dumfries (JKRM). On 30th January there was a **Little Owl** sitting on top of Greenlaw Town Hall, Berwickshire; when approached within 20 yards it flew off to the top of the grocer's shop (HDH). In East Lothian, one at Hedderwickhill Farm on 16th March had been there for a fortnight, and it remained there for some time after this date. Two pellets under its roost contained mice remains(AMcD). Within the bounds of Edinburgh, at Edmonstone, a **Long-eared Owl** which frequented a narrow strip of dense shrubbery was closely observed on 2nd, 3rd and 4th April (GWGB), and on the same farm a **Short-eared Owl** was seen on 6th January, and three on 23rd February and 2nd March (GWGB, CKM).

Evidence of the number of **Green Woodpeckers** in Lanarkshire is provided by reports of single birds at Craignethan Castle, Tullietudlem, on 23rd March, near Larkhall on the 26th, at the Falls of Clyde near Lanark on the same day (DSt), and at Hamilton on 8th April (AFP).

There are further reports of the influx of **Great Spotted Woodpeckers** last autumn (see *antea* 2: 319). In Aberdeenshire some, at least, arrived much earlier than those previously reported, one being seen to fly into a small wood near the Loch of Strathbeg on 28th August, though there had been none there for several years. The observer's last record for the area is of one stripping bark from a fence post on Forvie Moor on 12th January (DPW), on which date one was still present in Newburgh (GMD). In Caithness notes come from Dunbeath and Thurso on 11th December (PM), and from Castletown where there were two on 25th December, one on the 29th, one on 26th January, and one throughout March (DMS). More than usual were about Inverness and the Black Isle, Ross-shire, during December, and one was seen at Loch Morar on 2nd January (RHD). It is, of course, not claimed that none of these was a local bird. In Skye one was present in Dunvegan woods on 25th December and subsequently (HM & EM per MJCM), and in Lewis a female was found dead at Stornoway about the New Year, a different bird from that already reported (*loc. cit.*), which still survived (WAJC).

Large flocks of **Skylarks** include 200 on the move near Castle Douglas, Kirkcudbrightshire, on 5th January (AFA), 150 possibly brought by a temporary mild spell near Walkerburn, Peeblesshire, on 26th January (JB), a big immigration at Nairn on 12th February with 190, 220, 95 and 35 flying in from the east off the sea between 1015 hrs and 1025 hrs (RHD), and 600/700 in two fields near Ayr on 18th February (JSP).

A **Hooded Crow** was seen near Lockerbie, Dumfriesshire, on 20th and 23rd February (RTS). A cock **Black Redstart** was noted at Lerwick, Shetland, on 19th March (TH per GW).

A cock **Blackcap** which visited a bird table at Scone, Perthshire, on 7th March, and again about two weeks later, presumably survived the inhospitable winter in Scotland (MLy): two others certainly did so. These were a cock and hen previously reported from Rothes, Morayshire, in December and January (*antea* 2: 322). Until 23rd March they were seen almost daily, and then less frequently until the 31st. They were very aggressive to each other and to other species at the bird table, but latterly were seen together on a number of occasions, so that possibly they might remain to breed (AP). Two rather pale **Chiffchaffs** were noted at Wick, Caithness, on 11th November (DB).

As previously suggested (*antea* 2: 323) there were some reports of **Waxwings** about New Year. From 13th to 16th December three ate apples, deliberately left on the trees for them in Stirling (GTJ), and on the 28th there were two in St Andrews, Fife (MHEC), where subsequently one was seen from 5th to 12th January and on 15th February (DCA, MLo, DLS). On 1st January one was at Barr, Ayrshire (GH-O), and on the 3rd there were two at Rothes, Morayshire (AP), on the 11th some were in Comrie, Perthshire (GSS), next day one was seen in the Royal Botanic Garden, Edinburgh (TL per JHSw), and in Dundee there was one at the West End on the 18th (JHSu), and several in Ancrum Road from 14th February (per HB). Finally, one was killed on 2nd March from a flock of seven or eight which had been present in Inverness for the previous six weeks, and which was gone next day (MR). Apart from apples in Stirling, the only food mentioned by observers was cotoneaster berries, in five different localities.

There are further reports of single **Great Grey Shrikes** (see *antea* 2: 323): on 26th November near Lauriston, Kirkcudbrightshire (ADW); on 2nd December 3 miles south of Lairg, Sutherland (RJB); at Flanders Moss in Stirlingshire on 27th January (MFMM), and by the disused railway line there in both Stirlingshire and Perthshire on 2nd March (KMC, MMM); at the Loch of Butterstone, Dunkeld, Perthshire, on 23rd February (RJ); in Inverness-shire next day at Loch Insh meadows, where one was seen in October (*loc. cit.*) (RHD), and between Aviemore and Kingussie on 17th March (RU).

The I.C.I. factory at Girvan, Ayrshire, has 2,750 holes where bricks are missing—evidently in case it has to be extended—and at dusk on 3rd January each one held an average of at least three **Starlings**, thus providing a dormitory for at least 8,000 of them (MFMM).

In Fife, five **Twite** were seen at Cult Ness on 27th December, and seven on 11th February (GD, JP). **Crossbill** records are still coming in, and have again been held over.

More **Bramblings** are reported than in recent winters, with many records of small flocks and a few of larger ones, such as 50/100 in the Carsebreck area, Perthshire, on 23rd December (AGG, TDHM), and 200/250 at Skinflats, Stirlingshire, on 14th January (GD, JP). Near Lockerbie, Dumfriesshire, sensational numbers were seen; on 19th November there had been over 40, and on 30th January there were over 20, but on 12th February more than 200 were feeding on grain in a stackyard with a mixture of other finches, and next day there were over 500 there; numbers were down to 100 on the 14th, however, and gradually dwindled (WA, JDo, RTS).

A **Lapland Bunting** was seen at Aberlady on 1st January (HD), and again nearby on the 13th (AJP, TCS). We have previously commented on the status of the **Tree Sparrow** in north Lanarkshire (*antea* 2: 106); from the southern tip of the county comes a winter record of ten 2 miles SW of Symington on 12th December. In Angus (see *antea* 1: 498) there were 27 in a small plantation at Fern, near Brechin, on 8th January (GMC).

Earlier observations—before 7th October 1962

Information has been sent to us proving that the **Slavonian Grebes** which bred in Aberdeenshire in 1962 (see *antea* 2: 242) did so also in 1960 and 1961; the birds were sitting on full clutches in the first fortnight of June in both years (per AT).

A **Sooty Shearwater** was seen in the Minch near the Shiants on 4th August (NL).

At Thornhill, Dumfriesshire, a moribund **Bittern** was found in a field on 29th August. It died, and the skin was preserved (JY).

As the last swathe was cut in a hay field near Thornhill on 9th July a **Corncrake** escaped with eight chicks. It was seen again with them on the 13th, and with two flying young on 30th August. This is one of few recent records of successful breeding in Dumfriesshire (JY).

Another large flock of **Golden Plovers** (see *antea* 2: 315), with about 600 birds in it was at Crail, Fife, throughout the second half of August (RAJ). A **Spotted Redshank** flew down the River Annan near Lockerbie on 26th August, and there was one at Caerlaverock Castle on 16th September, both in Dumfriesshire (RTS). Two **Little Stints** were identified at Browhouse, Eastrigg, Dumfriesshire, on 26th August (RTS), and there were three at Hamilton Low Parks, Lanarkshire, on 29th September, and one on 6th October (AFP).

Good views were had of a **Black Tern** at Milngavie Reservoirs, Dunbartonshire, on 6th September, another to add to the list of those already published (*antea* 2: 259, 317) (TDHM).

At Rannagulzion, Blairgowrie, Perthshire, two **Collared Doves** flew up from a field on 22nd May; next day one was calling quite a lot and making love flights, but none was seen after the 24th (JWC).

General observations on food and plumage

During the cold weather, **Black-headed Gulls** near Culross, Fife, tried eating swedes, but evidently found them indigestible as small heaps were found thrown up on the breakwater wall. Nearby a Moorhen's whole leg, folded like a collapsed letter Z, was found in a **Tawny Owl's** pellet, the foot still glossy olive green and quite pliant, and all encased in mouse fur and a few tibial feathers. Evidently so large a bird is not beyond the Tawny Owl in an emergency (GD, JP). At Tore, Ross-shire, a small flock of a dozen **Fieldfares** remained from New Year until 13th March, apparently living entirely on turnips—to which this species may resort in hard weather—and perhaps a little grain from the sheep troughs (MKM-D).

At Kingsbarns, Fife, a very conspicuous and entirely white **Red-throated Diver** was diving in the sea on 3rd April (HB). On the Dee at Aberdeen a **Mute Swan** was seen on 13th February with practically no webbing on one foot, so that its toes tended to spread out rather more than on its normal foot. The same thing has happened at Newburgh, Aberdeenshire, and it is possible that these birds might have had the webbing ripped out by sharp pieces of ice when braking with their feet as they landed on the ice, something that has been necessary more often than usual this winter (EAG, DPW).

An apparently adult **Whooper Swan** was reported at Loch Ken in January 1962 with a pink bill (*antea* 2: 56), and what was probably the same bird was present again from December to February. The bill is distinctly brighter than that of a 1st winter bird, and this swan is apparently the pen of a pair with three young birds in tow. It seems that the suggestion that the pink bill might indicate a 2nd winter bird (*antea* 2: 107) cannot apply to this one (ADW).

Early in 1962 a photograph, taken from the deck of a Clyde steamer, of a **Herring Gull** with no legs, caused speculation as to how an apparently healthy bird thus mutilated could find a living, and it was concluded that it probably spent all its time in the air or on the water Then on 19th November, returning from Larne to Stranraer, the observer noticed that almost half the gulls following the ship were legless. The day was exceedingly cold, with a fierce north wind, and it was clear that the gulls were using their under tail-coverts as a muff or footwarmer. It is not known whether this habit has been recorded or not, but the story will perhaps in future prevent any Scottish ornithologist proving so gullible (MFMM).

And finally, a **Starling** with a pure white rump and tail at Balornock, Glasgow, on 27th February (BZ).

REVIEWS

SILENT SPRING. By Rachel Carson. London, Hamish Hamilton, 1963. Pp. xxii + 304. 25/-.

This is a book of vital importance to everyone interested in natural history. It is concerned with the grave dangers to all living organisms (including Man) arising from the ever-increasing development and use of dangerous chemicals for insecticides and herbicides. It is written by an American biologist who has made a special study of the inter-relationship of all living creatures and the chain-reactions set up by biological vacuums created by sudden mass extermination of pests.

Rachel Carson has the distinction of having written two best-sellers in the field of biology—*The Sea around us,* and now *Silent Spring*. Her basic interest is the science of ecology. Early in 1958 she became increasingly perturbed by the effects on wildlife of the widespread and indiscriminate use of toxic chemicals in forestry and agriculture in the U.S.A., and began collecting data on the subject from scientists all over the world. She combed the literature thoroughly; her list of references fills 49 pages in the book. The result is a remarkable synthesis and presentation of facts concerning toxic chemicals, written in a style easily understandable to the layman. The situation as revealed by the author is disquieting to say the least of it. In America, thousands of tons of D.D.T. and other more toxic chemicals have been sprayed over land, forests, and water without sufficient research having been carried out on possible harmful side-effects. Compared with this country, the use of the dangerous and highly persistent chlorinated hydrocarbons—D.D.T., D.D.D., aldrin, dieldrin, heptachlor, etc.—is on a vast scale. It has resulted in some appalling casualties to birds and other wildlife. Public anxiety about the effects on wildlife resulted in President Kennedy setting up a special committee of investigation.

What then are the facts which the author brings to our notice? She quotes many examples of heavy mortality to birds—one of the most striking being the shocking "kill" of American Robins resulting from D.D.T. sprays used to combat Dutch elm disease. "The trees are sprayed in the spring (usually at the rate of 2 to 6 lbs. of D.D.T. per 50-foot tree, which may be the equivalent of as much as 23 lbs. per acre where elms are numerous) and often again in July, at about half this concentration. Powerful sprayers direct a stream of poison to all parts of the tallest trees, killing directly not only the target organism, the bark beetle, but other insects, including pollinating species and predatory spiders and beetles. The poison forms a tenacious film over the leaves and bark. Rains do not wash it away. In the autumn the leaves fall to the ground, accumulate in sodden layers, and begin the slow process of becoming one with the soil. In this they are aided by the toil of the earthworms, who feed in the leaf litter, for elm leaves are among their favourite foods. In feeding on the leaves the worms also swallow the insecticide, accumulating and concentrating it in their bodies. Dr Barker found deposits of D.D.T. throughout the digestive tracts of the worms, their blood vessels, nerves, and body wall. Undoubtedly some of the earthworms themselves succumb, but others survive to become "biological magnifiers" of the poison. In the spring, the robins return to provide another link in the cycle. As few as eleven large earthworms can transfer a lethal dose of D.D.T. to a robin. And eleven worms form a small part of a day's rations to a bird that eats ten to twelve earthworms in as many minutes." Although the robin was the chief victim (one woman calling a Research Institute reported twelve robins lying dead on her lawn as she spoke), sixty-three different species were included among the specimens examined. This all happened despite assurances of the insecticide people that their sprays were "harmless to birds."

Since the book was written, Roger Tory Peterson told the reviewer that in 1962, on the Connecticut River, out of 62 pairs of nesting Ospreys, only one pair had succeeded in rearing one young. The remainder were sitting on infertile eggs. A chemical analysis of these eggs revealed high residues of chlorinated hydrocarbons. How did the Ospreys accumulate these? The answer is that there was large-scale spraying of forests with insecticides—millions of acres at a time. The dead insects find their way into the rivers where they are eaten by fish. The fish ingest cumulative doses; and then, along come the Ospreys to feed on the fish to absorb an even greater accumulation. A terrifying feature is the fact that these chlorinated hydrocarbons can be transferred genetically from parent to offspring before complete infertility is reached. What then of Man—the greatest predator on earth?

At a weekend conference at Cambridge in early March this year to discuss the decline in numbers of birds of prey, the meeting, attended by ornithologists, biologists, landowners, gamekeepers etc. attributed the severe reduction to the cumulative effects of persistent chlorinated hydrocarbons, and called for much more intensified research on the side-effects of such insecticides.

Although the Government has placed a voluntary ban on the sowing in spring of grain dressed with aldrin, dieldrin and heptachlor in agriculture, there are as yet no controls on their widespread use in private gardens, which are rapidly becoming veritable death-traps to wild birds. There is still far too much complacency in Government circles on toxic chemical dangers, as evidenced in the recent debate on the subject in the House of Lords.

Readers are reminded that specimens of any birds suspected of having died as a result of poisoning by toxic chemicals should be sent at once for chemical analysis to Peter Condor, R.S.P.B., The Lodge, Sandy, Bedfordshire.

George Waterston.

(The attention of readers is drawn to "Silent Spring"—Review and Commentary. Published by the Association of British Manufacturers of Agricultural Chemicals, 86 Strand, London W.C.2, 1963. Pp. 9.—Ed.).

Birds of the World. By Oliver L. Austin, Jr. Illustrated by Arthur Singer. British edition. London, Paul Hamlyn, 1962. Pp. 317; 300 colour plates. 84/-.

British ornithologists are often accused of insularity, and this accusation is not without some justice. We compile lists of the birds of Britain, or (if we are broad-minded) of Europe. Our reference books are *The Handbook of British Birds* and *A Field Guide to the Birds of Britain and Europe*. If we are seriously inclined we read books, or even write papers, on migration, or behaviour, or ecology, or the regulation of animal numbers—but the species they discuss are almost invariably those of the North Temperate zone, a small and colourless part of the world's avifauna. For most of us a quarter of the birds of the world are merely names we have read in books; two-thirds of the birds of the world are not even names. But even if we have heard of todies, or tinamous, or touracos, or trogons, where can we find them all described? Without an extensive library it has been truly impossible to learn anything about the birds of remote parts of the world.

Now, however, we will have less excuse for our ignorance, for this book describes and illustrates every one of the 155 families of the world's birds. Each family is allotted one or two pages of text, in which it is described in general terms—its distribution, the number and appearance of its species, their food and nesting habits, their migrations, voice and characteristic behaviour. The book is not a mere catalogue, however, for Dr Austin has included a large number of interesting facts about the systematics and life history of birds which have special peculiarities. Thus we can read about the nesting habits of hornbills, the longevity of terns, the feeding association between honey-guides and honey-badgers, the migration of the Slender-billed Shearwater, the displays of birds of paradise, the feather lice of flamingoes, the place of the Night Heron in the Japanese peerage, or the myths surrounding the legendary Quetzal. Perhaps too many of these examples are familiar from other books, but together they give an impressive demonstration of the fantastic variety in the appearance and habits of birds.

To describe eight thousand species in two hundred pages is a daunting task, and the accounts of some families are colourless collections of facts, but most families are brought to life in a very successful way. This would not have been possible without the illustrations, which include at least one bird from each family and comprise a total of over seven hundred species. Large in size, vivid in style and colour, lavish in scope and excellently reproduced, they make this a handsome, striking and lively book. In general they are attractive and accurate, although those of the colourful species are the most successful and the drabber birds are often over-drawn or over-coloured.

The book has an irritating number of minor errors, and does not quite live up to its superficial splendour or the extravagance of its advertising. But it is unlikely to be superseded for a long time, and can be thoroughly recommended to the armchair ornithologist who wishes to escape from his drab northern fauna and to browse among the lavish variety of the world of birds.

I. C. T. Nisbet.

BIRDS OF ANGUS. By Henry Boase. 1962. Typescript. Pp. iv+ 195; 1 map and 5 graphs.

This account is similar in style and content to *Birds of North and East Perthshire*, by the same author, reviewed in *Scottish Birds* 2 (4): 266-268. There is a useful description of the county, species lists of several areas, a systematic County List, notes on migration and rookeries, and a reference list of 50 titles. It is clear that in Angus Mr Boase spent most of his bird watching time in the past 50 years in the lowlands and on the shores of the rivers and lochs; and "the main purpose of this account is to place on record the writer's findings." The lists of birds seen at the various lochs and the interesting account of migration are valuable, since they are based on regular visits. The systematic list gives a statement under each species of records in a report by Drummond Hay (1886), *A Fauna of the Tay Basin and Strathmore* (1906), the *Geographical Distribution* (1928), *Status and Distribution of Wild Geese and Wild Duck in Scotland* (1938), and *The Birds of Scotland* (1953), supplemented by records published in ornithological journals between 1900 and 1961 together with the notes of the author and his friends. Clearly these statements need critical interpretation, and a casual reader might assume that few records mean that a species is scarce. Particularly with birds of the glens and hills, this is often not the case, but the author occasionally seems to conclude that the records given do present a fair assessment of a species' status. An account of such a large area cannot, however, hope to assess status except in small areas known intimately by the writer. The chief value of lists of this kind is to summarise observations not suitable for publication alone and to provide a basis for detailed future work by local specialists. County lists can eventually be prepared by editing local contributions. Mr Boase's example in selecting the lochs and streams for detailed treatment shows how these pioneer accounts can be planned, and his readers can profitably supplement his account with detailed local knowledge for other habitats and from other counties.

DAVID JENKINS.

A GUIDE TO THE BIRDS OF SUSSEX. By G. des Forges & D. D. Harber. Edinburgh and London, Oliver & Boyd, 1963. Pp. 177; fold-out map and 12 plates. 30/-.

To anyone watching birds in Sussex this book can be warmly recommended: as a model of what a local bird book should be, it might well be studied also by all who aspire to write such books.

ANDREW T. MACMILLAN.

Every Child's Book of Birds and Bird-watching. By Henry Makowski. English edition, translated by Kathleen Shaw, edited and adapted by Winwood Reade. London, Burke, 1962. Pp. 127; 54 plates, 66 text figures. 15/-.

Collins Guide to Bird Watching. By R. S. R. Fitter. London, Collins, 1963. Pp. 254; figures, line drawings and 40 plates. 21/-.

Birds: A Primer of Ornithology (Teach Yourself Books series). By G. E. Hyde. London, English Universities Press, 1962. Pp. xviii + 174; line drawings and 9 plates (one in colour). 7/6.

These three books—one translated from the German, two by English authors—share the general intention of introducing the budding bird watcher to the bird. But what is bird watching? To Mr Makowski it is essentially a hobby in which the amateur can both enjoy himself and aid the scientist by careful field observation, and one which can therefore be pursued as satisfactorily, and much more conveniently, in a town park or back garden, as on a distant mountain-side or mudflat. Mr Fitter aims his book more deliberately at the itinerant British week-ender, with his round of reservoirs, lakes and woods, to whom bird watching is primarily an intelligent form of escapism, and a matter of collecting records of birds seen largely for their own sake. Mr Hyde's much less satisfactory book gives the impression that his subject is not on a much higher intellectual level than train spotting.

Every Child's Book of Birds and Bird-Watching is excellent, though the title suggests a more juvenile book than it is. Most amateurs of whatever age, whether novice or not, could read it with profit, and certainly no child of ten or upwards would be bored or disappointed with its contents. It is written with an enthusiasm that never jars or condescends, and which has been nicely caught in the English version. It is lucid and refreshing on such potentially dry subjects as the physical structure and classification of birds, as well as on the easier topics of bird song and migration. It is ingenious on the practical side, full of useful information about taking notes, making nest boxes, bird baths, feeding tables, with good sections on photography and avian first-aid and, best of all, a list of the most important and illuminating questions to ask *about* birds in the breeding season, thus providing the amateur with an orientation for study that he too often lacks in dealing with common species. The faults are slight—contrary to the author's suggestion, most bird watchers find tripods for a telescope more of a burden than a help; the map showing migration over Britain is more misleading than enlightening; some of the captions to the photographs fall below the high standard of the text. Otherwise it is a very pleasant and well illustrated book. It would be good to think that it makes many converts to Mr Makowski's highly intelligent view of bird watching as a subject "in which amateur and scientist can work together, side by side, with each contributing to the knowledge and enjoyment of the other . . . It is not a hobby for the unadventurous. But it is a hobby which lasts a lifetime. If you take up bird-watching you will never feel bored or dull again."

Collins Guide to Bird Watching has also much to recommend it, and may achieve a popularity second only to Mr Fitter's previous *Pocket Guides* for the same publishers. It is in three sections—how to watch, what to watch and where to watch. The first 43 pages cover some of Mr Makowski's ground, with similar advice on taking notes, choosing binoculars, attracting and feeding birds, first-aid, photography and bird protection, all clear and sensible. While the author hopes the reader will "graduate from plain enjoyment of birds to something more scientific," the actual job of describing how a bird works, and how to study that subject, he leaves to others. Nearly half of the book consists of hints on the identification of every species occurring regularly in Britain, illustrated with a number of R. A. Richardson's drawings and 40 pages of photographs of typical habitats and some of the birds found in them. Considering the number of excellent illustrated books on identification—including Mr Fitter's own —this section might seem a little hard to justify, especially as coloured plates are out of the question and the text on each species is necessarily very brief. If the author pulls it off it is largely because of the shrewdness and humour of his observations—". . . I am convinced that some Blackcaps do also mimic Garden Warblers. This lends a kind of Marx brothers' air to the task of learning to separate these two . . ." The notes generally maintain a high standard of accuracy, but the statement that immature Mediterranean Gulls have no black on their wings is an extraordinary slip. The arrangement of species in what the author calls "roughly natural groupings," begins with sparrows and ends with terns, and is probably less helpful to the beginner than accustoming him to the Wetmore order from the start. In the final section, Mr Fitter breaks new ground with a 50 page list of the main localities of ornithological interest in every county in the British Isles, together with some of the ornithological specialities of each area. It would be easy to pick holes in the detail of these lists, and to regret the inadequate coverage of parts of the country—the wintering ducks off Seafield, for instance, surely one of the sensational sights of Scotland, are not mentioned—but to harp on this would be ungracious. The idea of an ornithological Baedeker is at once so novel, so simple and so useful that it is very much to be hoped that this section will be extended, revised and expanded to cover more "special birds" in each of the future editions that the book is likely to run to. Like Collins' other bird guides, it is attractively produced and pleasant to use.

Birds: A Primer of Ornithology is unfortunately a book which cannot be recommended. It demolishes, in ten pages, the topics of bird spotting techniques, conservation, changes in status, migration and classification; the remaining pages plod gracelessly from crows to game-birds, in the almost universally discarded *Handbook* order, as the author reels off "concise descriptions of all the birds which now breed in Britain, and also shorter references to non-breeding visitors." The small size of the book and the absence of plates except of the most unimaginative kind—"Mute Swan on nest"—preclude satisfactory presentation. Furthermore, the information given is often misleading, unhelpful and wrong—no winter plumages are even hinted at for any of the divers or grebes; the Snow Goose is "a pure white bird"; the song of the Sedge Warbler is "noisy rather than musical, but includes some softer notes"; outside Britain the Twite "breeds only in Norway"; and one could go on. There is constant confusion between species and sub-species, with Northern Willow Warbler, Siberian Chiffchaff and Continental Hedge Sparrow, to take but three, described as separate species from their British counterparts. This book is negligible by the side of Mr Makowski's and Mr Fitter's attractive and imaginative productions.

T. C. SMOUT.

THE HOUSE SPARROW (New Naturalist series). By J. D. Summers-Smith. London, Collins, 1963. Pp. xvi + 269; 25 plates (1 in colour); 36 text fiuges. 25/-.

The *New Naturalist* monographs on single species of birds conform to a regular pattern, a great part of the book being taken up by a detailed life history and the later chapters dealing with a variety of themes, such as Origins, Distribution, Relations with Man, and so on; and the two tests of merit are—how far is the research work original; and how well is it presented ? Mr Summers-Smith scores well in Test 1: it is clear that a great deal of painstaking labour has gone into this book and there seems to be nothing about the House Sparrow that he has not found out, except, of course, the one thing that we all want to know—why does it eat our crocuses? In Test 2 the author is not so successful: material that makes interesting papers in scientific periodicals does not always make a readable book, and this is why the later chapters, devoid of analysis of figures, make the better reading:

throughout there is a lack of sparkle, except when it is unintentional, as when the author, twice, refers, when he means "discrete," to sparrow colonies as being "discreet," the last adjective one would apply to them. The picture of the House Sparrow presented here, however, is commendably complete, wholly accurate and analysed with intelligence.

M. F. M. MEIKLEJOHN.

THE GOOSANDER AND RED-BREASTED MERGANSER AS PREDATORS OF SALMON IN SCOTTISH WATERS. Freshwater and Salmon Fisheries Research series, No. 29. By D. H. Mills. Edinburgh, H.M.S.O., 1962. Pp. 10. 3/6.

An important discussion, clearly showing that young salmon form a large part of the diet of Scottish sawbills; but leaving open the question whether or not their presence ultimately controls the number of adult salmon returning to our rivers.

ANDREW T MACMILLAN.

PORTRAIT OF A RIVER. The Wildlife of the Danube from the Black Sea to Budapest. By G. Mountfort. Illustrated by E. Hosking. London, Hutchinson, 1962. Pp. 207; line drawings, maps, and 57 plates (1 in colour). 35/-.

As the subtitle states, this is a survey of the wild life of the Danube from the Black Sea to Budapest. Basically it is the account of ornithological expeditions in 1960 and 1961 to Bulgaria and Hungary respectively. Especially interesting is the fact that both countries are behind the Iron Curtain, and the author outlines some of the problems found in organising such expeditions to a corner of Europe that is unfortunately inaccessible to the ordinary man in the street these days.

The excellent photography is mainly by Eric Hosking, although the author himself makes a by no means negligible contribution to a series of outstanding illustrations. These supplement the text in describing the Danube, its birds and its animals. A chapter on the filming of the Lesser Spotted Eagle in the Baltata forest well illustrates the problems involved in bird photography on expeditions such as these.

The first expedition started from Sofia and explored the lower reaches of the Danube, where it forms the boundary between Bulgaria and Rumania. The party then moved south-east across the Dobruja to the Black Sea coast. In this area the outstanding birds are the White Pelican, White-tailed Eagle and Great Bustard. Unfortunately, however, history and politics, both of which are discussed in this book, have created peculiar problems of conservation, to a great extent due to the large-scale collective farming. This is tending to eliminate the rare species through the destruction of their particular habitats. Egg collectors too, apparently exist even behind the Iron Curtain; and despite strict protection many species including the Rose-coloured Starling, one of Europe's rarest birds, are threatened with extinction as breeding birds on the Continent.

Various lakes just inland from the Black Sea coast were inspected before returning to Sofia by way of the high mountains south-east of the city. After rather an anticlimax of a climb, one of the highlights of the expedition was achieved—the filming of Wall Creepers at the nest.

The Hungarian expedition started from Budapest with a study of the birds of the surrounding mountains and marshes, where such species as Eagle Owl, Lesser Grey and Red-backed Shrikes, and River Warblers were seen. This took up the greater part of the expedition and it is captivatingly described. A large lake in the western half of Hungary, Lake Balaton, was then visited with gratifying results. Glossy Ibis, Night Herons, Spoonbills and Bearded Tits were among the many species seen in this area.

The book concludes with an appendix, including a list of birds seen and an indication of their status in the regions visited. A useful selected bibliography is also given.

C. N. L. COWPER.

A MOSAIC OF ISLANDS. By Kenneth Williamson & J. Morton Boyd. Edinburgh and London, Oliver & Boyd, 1963. Pp. 187; maps, text figures and 16 plates. 21/-.

In *A Mosaic of Islands* the authors of *St Kilda Summer* capture something of the fascination of small and remote islands. The book is by no means confined to birds, but is flavoured in the fine tradition of Robert Atkinson's classic, *Island Going*. Whale-hunting, archaeology, bird-fowling and studies of seals—the pages are filled with the authors' impressions of their visits, brief or extended, to the Faroes, Fair Isle, Rhum, Unst, St Kilda, North Rona and a host of other islands in the north and west; not least, is a generous sprinkling of maps, which help one locate the places mentioned and bring them to life in one's mind.

ANDREW T. MACMILLAN.

THE BIRD IN THE HAND (B.T.O. Field Guide No. 6). By R. K. Cornwallis & A. E. Smith. Revised By K. Williamson, Oxford, British Trust for Ornithology, 1963 (second edition). First published 1960. Pp. 78; text figures. Paper cover 6/-, boards 9/6.

This revised edition will be almost essential for anyone making use of the section on sexing and ageing; quite a few of the criteria given in the earlier edition have in practice proved unreliable, and the text carries further warnings on problems of identification. Two dozen new species have been included and a more professional looking cover added, while one blank interleaving sheet and an index have disappeared, and the price has gone up by half.

ANDREW T. MACMILLAN.

REQUESTS FOR INFORMATION

Eigg, Muck, Rhum and Canna. A paper is being prepared on the birds of these islands, and the authors would be most grateful for any unpublished information. In particular, dates of visits, species lists with approximate counts, and proof of breeding would be of value. Information about Rhum and Canna should be sent to Dr P. R. Evans, Edward Grey Institute, Botanic Gardens, Oxford, and about Eigg and Muck to Miss W. U. Flower, 5 Airthrey Avenue, Glasgow W.4.

Chough Enquiry 1963. During the past decade the Chough has possibly increased in Wales and the Isle of Man, though the severe winter may have set it back. Information is sought for all areas on breeding numbers and distribution, size of flocks throughout the year, nesting success, and nature of nest sites, for 1963 and earlier years, as well as data on food, habitat, mortality etc. where available. This enquiry is supported by the B.T.O., and questionnaires may be had from the organiser, Martin Richards, Sub-Department of Animal Behaviour, High Street, Madingley, Cambridge.

CORRECTION

The Barnacle Geese referred to on page 307 (lines 33 and 34) escaped from a collection at "Tayfield, Newport," not at "Tayport," 2½ miles away. The significance of this is that there are wildfowl collections at both places, and also that the wildfowl on the Tay estuary are very different at these two points.

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

ANNUAL CONFERENCE

The Sixteenth Annual Conference and Twenty-sixth Annual General Meeting of the Club will be held in the Dunblane Hotel Hydro, Dunblane, Perthshire, from 25th to 27th October 1963. The conference programme will be printed in the next issue of "Scottish Birds," and this intimation is given in order that members may make their hotel reservations in good time. All bookings, including those at the Hotel Hydro, should be made with the hotels and **not** with the Secretary.

Hotel Accommodation in Dunblane

DUNBLANE HOTEL HYDRO (Tel. 3161). Special Conference charge: £4, 16s 0d. This includes accommodation and all meals from Friday dinner until Sunday luncheon, the Annual Dinner, after-meal coffees, morning coffees, and early morning teas. A 7½% gratuity charge will be added to all bills.

Residents staying part of the weekend will be charged as follows: Room and breakfast 32s 6d, dinner 12s 6d, or 16s 6d for the Annual Dinner, luncheon 7s 6d, afternoon tea 3s 6d, after-meal coffee 1s, early morning tea 1s, morning coffee and biscuits 1s 6d.

STIRLING ARMS HOTEL (Tel. 2156). Bed and breakfast from 25s.

*THE NEUK PRIVATE HOTEL, Doune Road (Tel. 2150). Bed and breakfast 18s 6d to 19s 6d.

*SCHIEHALLION HOTEL, Doune Road (Tel. 3141). Bed and breakfast 18s 6d to 21s.

BLAIRALAN, Dargie Terrace (Tel. 3196). Bed and breakfast 17s 6d to 18s 6d.

¶ARDLEIGHTON HOTEL (Tel. 2273). Bed and breakfast 15s to 17s 6d.

*These hotels are some distance from the Conference Hotel.
¶Situated near the Hydro Hotel gates.

Hotel Accommodation in Bridge of Allan

ALLAN WATER HOTEL (Tel. Bridge of Allan 2293). Bed and breakfast 35s to 47s 6d.

ROYAL HOTEL (Tel. Bridge of Allan 2284). Bed and breakfast 33s to 36s.

Members with cars who have difficulty in obtaining single rooms in Dunblane should find that the above two hotels in Bridge of Allan have ample single accommodation. The distance from Dunblane is about 3 miles.

The terms for hotels other than the Conference Hotel are quoted as a guide only, and prices should be confirmed.

The Conference registration fee will be 10s. The cost of the Annual Dinner to members not staying in the Conference Hotel will be 16s 6d. Both these items should be paid at the Conference registration office on arrival at the Hydro.

THE LATE SIR HUGH GLADSTONE'S LIBRARY, PENPONT

Mr John Gladstone, Capenoch, Penpont, Dumfriesshire, has most generously offered facilities to members of the Club to visit and consult the valuable and unique library of ornithological books and pamphlets collected by his father, the late Sir Hugh Gladstone. This collection comprises books published prior to his death in 1949 and is considered to be the most complete in existence. There is also a collection of pictures and stuffed birds, many of which are rare and of extreme interest.

Members who are making a particular study of ornithological literature and who wish to take advantage of this extremely kind offer may use the library by previous arrangement with Mr Gladstone, and are asked to give him ample notice in case he is absent from home when they write.

AYR BRANCH

We regret that the address of Dr M. E. Castle, new Secretary of the Ayr Branch, was given incorrectly in the last number of the journal. It should be Mount Hamilton, St Quivox, by Ayr.

NEW GROUPS IN INVERNESS AND THURSO

The Council of the Club announces the formation of two new Club Groups in Inverness and Thurso. Although at present not sufficiently large to be recognised as Branches or to qualify for representation on the Council, these Groups have the full support and recognition of the Council, and notices of their meetings and activities will be published with those of the Branches. It is hoped also to provide one or two official lecturers to visit these Groups during each Session.

The Thurso Group has appointed J. M. Gunn as their Chairman, and D. M. Stark, 2 Harland Road, Castletown, by Thurso, Caithness, as Secretary. This Group has planned various activities during the summer and has already carried out a census of Rooks in Caithness, and a bird song and ringing excursion at Reay, and has held a public film show in Thurso. Members in the area may wish to note the following dates:

23rd June—Census of the Arctic Skua in Caithness.
7th July—Ringing excursion, gull colonies.
11th August—Sea watches at Strathy, Dunnet, Duncansby and Noss Heads.

The autumn migration will be covered as far as possible on most weekends at Noss Head and Wick. Further details may be obtained from the Group Secretary.

Details of Inverness Group office-bearers and meetings will be published in the next number of the journal, and members in the area are asked to support this new venture which replaces the original Inverness Bird Watching Group.

The Council extends its good wishes to both Groups and it is hoped that they will lead to an increased interest in field work and provide centres of contact for the more scattered members of the Club in the northern counties.

DONATIONS TO THE SCOTTISH CENTRE

As a result of a most generous donation of £200 to the Scottish Centre, the Council intend to recondition and furnish a new room for the Lending Section of the Library. The growth of the Reference Library has curtailed the space available for the Lending Section, and this gift has come at a very appropriate time. It is hoped that the room will be ready by early autumn. Gifts of books from members to increase the number available for lending will also be much appreciated.

The Council has also received from Miss Betty Garden the very generous donation of £60, and it is intended to use this sum for the purchase of a glass-fronted bookcase to hold the rarer and more valuable books in the Reference Library.

The Council is extremely grateful for these gifts, which will contribute so much to the development of the Club.

Highland and Overseas Field Holidays

Bird-watching and general Natural History holidays in Scotland and on the Continent, planned for small groups and run on informal lines. Special studies of hill birds, flora and fauna in Cairngorms, Grampian and Monadhliath ranges; autumn migration Spey area and Moray Firth.

Overseas visits include Holland, France, Norway, Sweden, etc. and special Migration Watch Sept. 1963.

New annexe accommodation at Pitmain Beag, Kingussie; study facilities and small library. Day or weekend visitors welcome as well as reservations for regular week or fortnight programme. For details write to:

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SCOTTISH BIRDS

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The Journal of
The Scottish Ornithologists' Club

Vol. 2 No. 7 *Autumn 1963*

FIVE SHILLINGS

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Ayr, Dumfries, Dundee, Edinburgh, Glasgow, St Andrews and elsewhere at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish Ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited, and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. Joint membership is available to married couples at an annual subscription of 40/-. "Scottish Birds" is issued free to members but Joint members will receive only one copy between them.

The affairs of the Club are controlled by a Council composed of the Hon. Presidents, the President, the Vice-President, the Hon. Treasurer, the Editor and Business Editor of "Scottish Birds", the Hon. Treasurer of the House Fabric Fund, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

An official tie with small white Crested Tits embroidered on it can be obtained in dark green or in navy blue by Members only from Messrs R. W. Forsyth Ltd., Princes Street, Edinburgh, or 5 Renfield Street, Glasgow, C.2 at a cost of 17s 9d post extra. A small brooch in silver and blue can be obtained for the use of Members of the Club. Price 2s 6d each from the Secretary, or from Hon. Branch Secretaries.

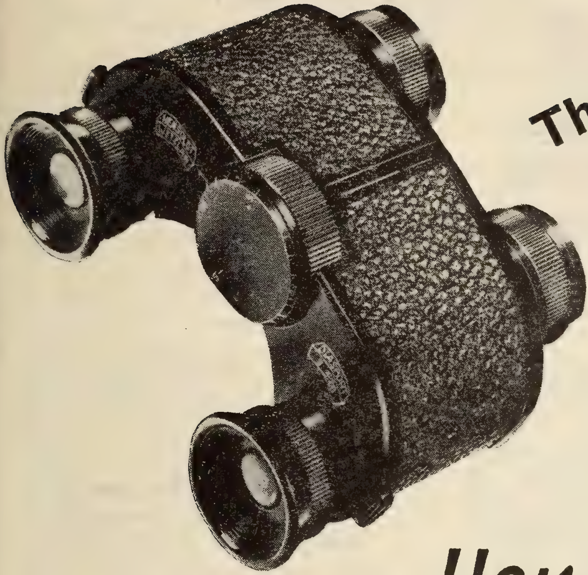
Forms of application for Membership, copy of the Club Constitution, and other literature is obtainable from the Club Secretary, Mrs George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7. (Tel. Waverley 6042).

CLUB-ROOM AND LIBRARY

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to Members during office hours, and on Wednesday evenings from 7 to 10 p.m. during the winter months. Members may use the Reference Library and borrow books from the Lending Library. Facilities for making tea or coffee are available at a nominal charge and Members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen can be used for the informal showing ol slides at a charge of 2s 6d per night to cover the replacement of bulbs.

EDITORIAL ADDRESS

All contributions to A. T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Advertisements to T. C. Smout, 93 Warrender Park Road, Edinburgh 9.



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SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Vol. 2 No. 7 **Autumn 1963**

Edited by A. T. Macmillan with the assistance of D. G. Andrew and T. C. Smout. Business Editor, T. C. Smout. Cover Design (Leach's Petrel) by Len Fullerton. *Published quarterly.*

Editorial

S.O.C. Bookshop. The Scottish Ornithologists' Club now has a fine bookshop at the Scottish Centre for Ornithology and Bird Protection. Details appear on another page, and an order form is enclosed. The bookshop is recognised by the Publishers' Association, and you may now get all your new bird books there, by post or in person. Any profits from the sale of books will help to pay for the Club's other activities—*Scottish Birds,* the library, lectures. By buying from the S.O.C. you will benefit ornithology in Scotland at no cost to yourself.

For the S.O.C. this is yet another step forward: in a way it is an act of faith in you. Nothing quite like it has been done in Britain before. We very much hope that all Club members and readers of *Scottish Birds* will support this venture. The aim will be to carry the most comprehensive stock of worthwhile bird books in Scotland. Already the selection has tempted your editors into buying an impressive number of books missed when they first appeared. With a wide range of books in the S.O.C. bookshop, and with R.S.P.B. nestboxes, feeding devices, greeting cards, records, wall charts and other gifts under the same roof, the Scottish Centre seems an excellent place to buy Christmas presents for your birdwatching friends; and it will not be surprising if you come away with something for yourself as well.

B.T.O. policy. The British Trust for Ornithology, currently moving to new headquarters at Beech Grove, Tring, recently resolved that its policy should be: "The study of the bird population of the British Isles in respect of distribution, numbers and movements and of the ecological factors, including those of human origin, affecting them. It shall be one of the principal objects of this policy to answer the following question: In what ways is contemporary man affecting wild birds and, in particular, how are changes in forestry, agricultural and horticultural practice influencing bird populations?" The B.T.O.'s various activities—ringing, nest records, census of common birds, inland observation points, toxic chemical studies etc.—are being coordinated towards answering this question.

In the April 1963 number of *Bird Migration* emphasis has shifted from "migrations" to "movements," and an examination is made of the ways in which the number of individuals of a species noted at the observatories may indicate the level of population on the breeding grounds. Post-breeding dispersion under conditions of high population density is now suggested as an explanation for certain puzzling falls of migrant species in settled anticyclonic weather.

Birds of Prey Conference. By every account the Birds of Prey Conference at Cambridge in March was an outstanding success. The tremendous decline of Peregrine, Sparrowhawk, Kestrel and other species in England during the past few years was one of the most urgent topics, but contributions and discussion ranged widely; text and summaries of the papers will be found in *Bird Notes* (Summer 1963) and *British Birds* (April 1963).

A most encouraging feature of recent years has been the growing realisation that bird watchers and sportsmen need not be always attacking each other—they share an enjoyment of birds and open places, and their interests are by no means as much in conflict as the extremist paints them. The Birds of Prey Conference showed what may be achieved through cooperation and friendly discussion of differences of approach. Many valuable contacts were made, and in place of violent argument and disagreement (for which some sections of the press had evidently hoped!) a unanimous resolution was passed that:

> "This Birds of Prey Conference, of sportsmen, falconers, pigeon fanciers, landowners, farmers, gamekeepers, naturalists, research scientists and others, finds conclusive evidence of an alarming decline in numbers of birds of prey in Britain over the past six years. The Conference finds that the chief factor in this rapid decrease is the use of certain types of toxic chemicals on the land and gives warning that continuance of present trends would lead to the early extinction in Britain of one or more species. Because of their great value on scientific and economic grounds and as part of our national heritage, birds of prey, therefore, urgently need all possible aid for their preservation. The Conference urgently recommends that the agricultural, horticultural and forestry use of such chemicals, especially persistent chlorinated hydrocarbons, should be critically re-examined and where necessary reduced. There is also a need for intensified research, better observance and enforcement of the Protection of Birds Act 1954, and more public education about this emergency."

Toxic chemicals. The perceptive reader must have noted how the foregoing items are both related to the problems of toxic chemicals on the land. This reflects the sudden realisation by British bird watchers that this is the biggest threat to birds, and not only birds, in recent years.

The subject was debated in the House of Lords on 20th March 1963, but press comment was disappointingly sparse and complacent, and it is clear that official sources do not view the matter so gravely as do many well-informed and impartial observers.

In June the R.S.P.B. asked the Minister of Agriculture, Fisheries and Food to withdraw without delay the booklet *Chemicals for the Gardener* recently published by the Ministry. The booklet claimed that, "so far as is known, none of the garden packs when used according to the directions is likely to be harmful either to birds or other wild life in the garden." The R.S.P.B. felt that this was untrue and would add to the mounting toll of bird life; research carried out by the Nature Conservancy, together with the now considerable published evidence, had demonstrated beyond reasonable doubt that the chlorinated hydrocarbons, such as Aldrin, Dieldrin, DDT and BHC were a grave hazard to wild life. The booklet has now been withdrawn.

Miss E. A. Garden. Her many friends will be saddened to learn that Betty Garden, who had been seriously ill for some time, died on 2nd September 1963. A full notice will appear in the winter number of *Scottish Birds*.

Fair Isle. Our good wishes go to Peter Davis; after six notably successful years at Fair Isle he returns to the less rigorous life of the south to an appointment with the B.T.O. Fair Isle has a very special place in the affections of Scottish bird watchers. In a quiet way we feel a sort of irrational personal pride in the fact that this famous bird observatory is Scottish; and many of us cherish unforgettable memories of the island and its people and of birds seen there. But all the time the very existence of the island community, and with it the bird observatory, hangs by a thread. No further introduction is needed to Peter Davis's fascinating and penetrating study of the island in this number—first the people, and second the birds. Fair Isle is so much a part of Scottish bird watching that everything about it is of enormous interest to us all.

As we go to press we learn that the new warden is to be Roy H. Dennis, who knows the island well, having worked there as assistant warden. We wish both Mr and Mrs Dennis every success at Fair Isle.

RECENT DEVELOPMENTS AT FAIR ISLE

PETER DAVIS

A request from the editor of *Scottish Birds* that I should review the recent developments at Fair Isle, both in ornithology and with regard to the island's economy, came shortly before I made the difficult decision to quit the isle for another post. What follows is therefore a review of the six years I have lived and worked on the island, written from the more detached viewpoint of one no longer committed to share the pleasures and the problems of life in Scotland's remotest community.

I should explain, for the benefit of those readers who are unfamiliar with the island and its affairs, that when the bird observatory was founded by George Waterston and his colleagues in 1948, it was hoped that not only would it make an outstanding contribution to the study of birds, but also, through the hostel, give a substantial boost to the stagnant economy of the island. While the first hope was amply realised, through the energy and ability of Kenneth Williamson, the second was not entirely fulfilled. Although the visitors provided a steady market for the local knitwear and a new source of income for the crew of the mailboat, and the hostel consumed the produce of the crofts, it was only in the first two or three years that any considerable sums could be spent on local labour ; thereafter, the observatory's financial position steadily deteriorated. Meanwhile the native population (not counting lightkeepers and other temporary residents) decreased from nearly seventy in 1948 to less than fifty in 1954. In this year, Mr Waterston persuaded the National Trust for Scotland to purchase the island, which he had owned since 1947, realising that it was far beyond the scope of private individuals to provide the capital for developments which were imperative if the community was to survive and prosper. Mr Waterston became the National Trust's factor for the island, continuing also as honorary secretary of the Bird Observatory Trust, which remained an independent body.

My wife and I and our new staff arrived at Fair Isle in the spring of 1957, at a crucial and interesting stage. The plans of the National Trust were beginning to take shape, and we were to see them develop. Our own commission was to maintain the ornithological work, and at the same time to try to reorganise the hostel on a profitable basis ; and to offset the losses (amounting to over £2000) incurred in earlier years. With the help of a generous contribution of £1000 from the National Trust, these debts were repaid by 1961; and although rising costs temporarily overtook us in 1962, there is every

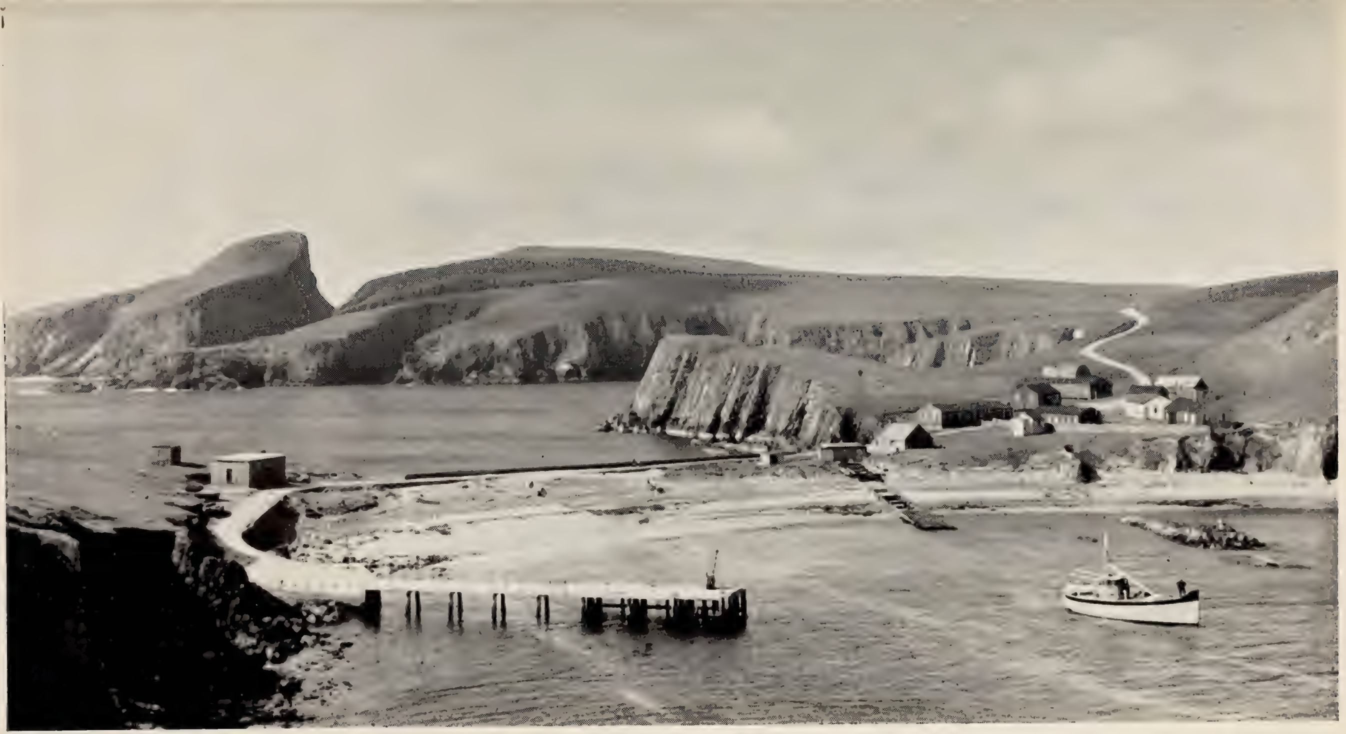

PLATE 20. FAIR ISLE. This view shows the island mailboat *Good Shepherd* in the North Haven, the new pier, the slipway up which the boat must be hauled except in settled summer weather, the hostel and bird observatory buildings, and Sheep Craig (see page 400).

Photograph by Angela Davis.

Plate 21. Fair Isle. The warden, Peter Davis, with a Kittiwake (see page 400).

Photograph by Angela Davis.

reason to suppose that the hostel can continue to pay its way in the future. The observatory and its greatly increased number of visitors have been spending between £1000 and £1500 in the island in recent years, much of this in the reopened general store.

ISLAND DEVELOPMENTS

The restoration of the island shop was the earliest result of the National Trust's policy of encouraging immigration to the isle. An English family, the Tills, came in to run the store and a croft, at the end of 1956. Early in 1957 Stewart and Anne Thomson and their children returned to live in the isle, where Stewart (an Unst man) had served as a lightkeeper and married a local girl twelve years earlier. They worked the croft of Springfield until they took over the post office and the Shirva croft in 1959. In the autumn of 1957 Adam Johnson, a handloom weaver who had instructed several islanders in this craft the previous winter, brought in his family from Shetland and settled at the Haa. Following this immigration, the population of the crofts stood at 56 at the close of 1957.

The decline in the population up to 1956 had resulted in an improvement in the incomes of those who remained, for there were fewer families to share the available sheep grazing, the knitwear market, and the various perquisites—manning the mailboat, lighthouse work, coast watching, road mending and suchlike. In 1957 the rebuilding of the nurse's house by the county council gave steady employment to several men. The following year, 1958, was particularly eventful and prosperous. There was ample work for the increased population at the construction of a new pier at North Haven, and at the rebuilding of the croft house at Midway ; the first of the National Trust's cruises in M.V. *Meteor* brought a new outlet for textiles ; lobster fishing was revived, one boat working the whole summer with considerable success ; and as the result of agitation by the Trust and others, the county council agreed to take over the running of the mailboat *Good Shepherd,* to pay the crew a regular wage, and to improve the service by introducing twice-weekly sailings in the summer months. The new pier, which cost the county £10,000 and the National Trust £1000, was a tremendous boon, eliminating the use of flit boats and permitting a great saving in manual effort and time—always an important factor in the short winter days.

After this year of activity and prosperity, there were unfortunate setbacks in 1959. Two small construction jobs gave brief employment, and the cruises became an annual event, but otherwise the community had to rely on its own resources. Three boats worked the lobsters all summer, but the immigrants could not participate in this rewarding occupation. By autumn the Tills were obliged to leave; and they were soon followed by an island family who had been planning for some years to join their relatives in New Zealand. A bright spot was the marriage of a young islander to a Lerwick girl, and their decision to remain in the isle and take over the shop. The Johnsons departed early in 1960, and the community declined below the level of 1956.

Since 1960 the National Trust has invested a good deal of money in the rebuilding of two more houses, Schooltown in 1961 and Shirva in 1962, and in 1962 provided diesel generators to supply electricity to all the houses and the bird observatory at a cost of some £5000. The two miles of underground cable was laid by voluntary labour from International Voluntary Services. One more immigrant settled in; a young Englishman, Gordon Barnes, who had spent two seasons as my assistant, took over the Setter croft after the accidental death of its previous tenant in 1961.

At the end of 1962 the crofters were enjoying better living standards and amenities than at any previous time, but the population was down to 41, of whom five were receiving further education outwith the island. This year, the number will increase by nine—a newly-wed couple from Edinburgh and a family of seven from Kent—but the increase will be partly offset by the emigration of a young member of the mailboat's crew and his mother, and four more children (including two of the immigrants) will be away at school.

What are the prospects for the future of the community? One would need prevision to answer this with confidence, but in my view they are far from bright. The painful truth is that the native community is no longer viable. Nearly half the people are over fifty years of age, and although they include at present some of the most able and active members, the time when they will become less sprightly cannot be postponed indefinitely. The younger generations are sadly thinned by emigration, and indeed there is a whole missing generation of girls, for by some strange biological quirk, none were born between about 1930 and 1950, though some seventeen boys came in that time. By the end of the year, only three of these young men will remain, and only one yet has a wife and family. Moreover, the present system of education which removes the children to Lerwick at the age of twelve, and trains them to take their places in the wider world, must result in few, if any, returning to live and work in the isle.

Can immigration make good these losses? Recent experience suggests that it will be very difficult to find permanent settlers; and that for the most part there will be a succession of romantic enthusiasts who will enjoy the novelty of island life for a few years, and then depart. Such temporary residents could hardly provide the native skills, especially on the sea, which are vital to the future. Even if the crew of the *Good Shepherd* relished the idea of introducing outsiders into the crew, which at present they do not, they estimate it would be at least ten years before an incomer would have a working knowledge of one of the trickiest crossings in northern Europe. The transport problem is therefore the rock upon which the whole enterprise is most likely to founder. At present the service to Shetland is maintained with truly astonishing regularity. Experience at other remote islands (among them Lundy, where I lived from 1951 to 1954) shows that there would be continual frustrating delays and uncertainties if the community had to rely on a ferry based elsewhere. The hostel could hardly continue to operate in such circumstances, and few people would accept such conditions as a permanent feature of their lives.

The barriers against permanent settlement by outsiders are so often minimised that it is time they were discussed with candour. First, we must accept that people who are used to a similar life in other remote places will be unlikely to offer themselves ; at any rate, they have so far shown no signs of doing so. Secondly, it is obvious that there are no financial inducements to immigration. It follows that most candidates will be from the more densely populated parts of Britain, activated largely by a desire to "get away from it all," and by a rather romantic conception of life on a small island. This was true of almost all the sixty-odd applicants for the two vacant crofts advertised in 1962. This attitude usually predicates a degree of misanthropy and unwillingness to conform, and is most often found in people with an "intellectual" background. At Fair Isle the immigrant enters a community which inevitably values practical far above intellectual abilities, and which seeks to exact a high level of conformity in nearly all individual and communal activities, including, of course, religious practices. Despite the great hospitality which the islanders always show to visitors, an immigrant's failure to conform may result in outspoken criticism and even passive obstruction. Even without such obstacles, integration into a community which is made up almost entirely of close blood-relations, which has already partitioned most of the more lucrative part-time jobs, and most members of which resent the introduction of outsiders even while conceding its necessity, poses many problems. The ideal immigrant would be a man whose main ambition was to have a piece of land and work it, a man untroubled by imaginative or intellectual interests, of extremely placid temperament, and willing to adapt himself completely to the ways of the island. Such men appear to be few and far between, and wives to match them even scarcer.

How do the islanders themselves regard the recent developments ? The majority look back with nostalgia to the days when every house held a large family and the isle was buzzing with communal life ; they are fatalistic about the future, regarding the end of a thousand years of settlement as inevitable, though many hope it will not be in their time. A small but vocal minority believes there is still a future for the community, that the possibilities for agricultural development and reclamation are considerable (which is undoubtedly true), and that somewhere there are people who would be content to accept hard work for comparatively low incomes, and the narrow horizons, and share in this effort. Both groups have generally welcomed the improved amenities provided for them in recent years, though the expense of maintaining some of them is often deplored. Despite the largesse of the National Trust, some element of the age-old resentment towards the laird persists, and this has not been diminished by the Trust's rather paternalistic approach to some matters in recent years. It should be admitted, however, that island opinion is rather difficult to sound, because the islanders seldom express their true feelings about any proposals at the public meetings called by the Trust representatives, and also because there is seldom any real unanimity among them. An illustration of the radically different outlook of the islesfolk and the Trust was provided in 1962, when the Trust arranged for the demolition of the derelict radar station on Ward Hill in order to improve the profile of the island, and assumed that this would meet with general approbation. There was, on the contrary, a general outcry, for the islanders regarded the concrete structures not as hideous eyesores but as admirable shelters for the hill sheep! Matters were made worse when it was discovered, after the explosions, that several acres of grazing were now covered with outsized rubble.

The general complaint about the recent developments, that they came thirty or forty years too late, is not of course an indictment of the Trust ; though it is a good swipe at the indifference of the government. It seems however to be a fair comment that the improvements in the past six years have been made piecemeal, and have concentrated on amenities rather than on the economy, which is what really matters. There has never been any implementation of a comprehensive plan to save the island, or even any clear statement of aims. At this late stage it is not clear what the aims can be. Certainly it is too late to preserve the community as a sort of museum tableau of ancient language, customs, and practices, even if this were desirable or feasible in the twentieth century. The main concern of the islanders is in fact to reject the "old things" and to have material standards comparable with those enjoyed by their fellow countrymen elsewhere. As yet there is no prospect of a radical improvement in the basic agricultural economy which must support these standards when the present phase of subsidised improvements to housing and amenities comes to a close ; and with two or three honourable exceptions the remaining islanders are unlikely to take the initiative in new developments. One must therefore regretfully conclude that, in spite of the recent developments, the position of the community is now more precarious, and the future more uncertain, than at any time in its long history.

THE BIRD OBSERVATORY

The observatory will sink or swim with the island community ; for in the event of evacuation the observations could only be continued by occasional expeditions, mounted at considerable expense. Meanwhile the work has gone steadily forward.

The main function of a bird observatory is to make daily counts of migrating birds, and to subject them to detailed laboratory examination and ringing ; this work has continued along the general lines established before 1957. There has however been an extension of the season of observation, which before 1957 normally covered only May to October, and since then has occupied the whole year except for a period of three to eight weeks in December and January. This increased coverage has given us a better knowledge of the winter bird population ; and the strength of the movements in March, April and in November has been something of a revelation, especially those of the thrushes, Robins and finches. In some years the heaviest falls of the season have occurred during these months. The number of species observed each year has risen from an average of less than 150 to around 180.

The ringing totals are now much higher both as the result of this exploitation of the early and late migrations and because we have started to ring the cliff-nesting seabirds, which were largely neglected before 1957. The Shag, Puffin, and Fulmar are now among the leading scores in each annual ringing list, and the other auks and gulls are well represented. Shag recoveries have been so numerous that we already have a good picture of the dispersion from Fair Isle, and the pattern begins to emerge for other seabirds also. The annual ringing now amounts to over 5500 birds, compared with an average of less than half that number before 1957, and recoveries oversea have increased from under twenty in 1957 to seventy-five in 1962. Some of these recent recoveries are remarkable for their distance or unexpected direction from Fair Isle, such as the Bar-tailed Godwit in Siberia, the *Bonxie and Puffin in

* Great Skua

Greenland, the White Wagtail in West Africa, or the Snow Bunting in Newfoundland ; others have thrown new light on obscure problems, or posed new ones yet to be completely solved. Among these I may mention two Blackbirds which returned, presumably, to Scandinavia, where they were recovered within a few days of being ringed at Fair Isle in autumn ; and an interesting series of birds which had returned to the south or south-east within a short time of being ringed here in spring, presumably having overshot their real destination. These include Blackbird and Robin and Hedge Sparrow in West Germany, Bluethroat in Belgium, and Hedge Sparrow, White Wagtail and Starling in eastern England. Birds of a variety of species, ringed in Iceland, Spitzbergen, N. Russia, Finland, Norway, Denmark, Germany, Holland, and various parts of Britain have been recovered at Fair Isle during the past six years. Details of these, and of many other interesting recoveries, appear regularly in the observatory's own journal, the *Fair Isle Bird Observatory Bulletin.*

The introduction of mist-nets, first used here in 1956, and the growth of the exciting sport of dazzle-netting at night, have supplemented the catch of the Heligoland traps, and contributed to extend the variety of species handled each year. A figure of 87 species ringed in 1957 was then a record for the observatory, but in 1958, with 101, we became the first British ringing organisation to achieve the century, and this has been surpassed in each subsequent year. By 1962 our record year's catch stood at 125 species, or about two-thirds of the number seen on the island in the year. Nearly 190 species have now been ringed by the observatory.

Fair Isle has maintained its reputation as a place where extreme rarities will frequently delight the tally hunter. Since 1957 there have been two more additions to the British List, the Song Sparrow and the River Warbler, bringing the total of new British birds found on the island to seventeen. Several other birds have given their second or third British records. A further three species were acceptably recorded for the first time in Scotland, Mediterranean Gull, Dusky Thrush, and Bonelli's Warbler, with a fourth if the Parrot Crossbill is regarded as specifically distinct from the Scottish race (and provided one treats all previous reports as not proven). In addition to these six species, twelve others were added to the island list ; bringing it, by my reckoning, to 283 species (a further dozen have more or less dubious records for earlier years).

The establishment of the British Trust for Ornithology's migration research office in 1958, and the radar studies of migration made by Dr W. R. P. Bourne in N.E. Scotland and by Dr M. T. Myres in Shetland between 1959 and 1961, have resulted in good use being made of the Fair Isle observations. In connection with the radar work it was found that the Fair Isle records corresponded more frequently and more closely with the movements observed by radar than was the case with the parallel observations at radar stations and observatories in eastern and southern England, presumably because of Fair Isle's remoteness and the greater readiness of birds to land and be seen by the time they reached our area. Dr Bourne, in collaboration with the observatory, has made a detailed analysis of all the Fair Isle records up to 1960 which will be an integral part of his forthcoming paper on the radar watch. Thus, by identifying the species which were only blips on the radar screen we have contributed to the greatest advance in migration study for many years—a work which has removed the study of "invisible" migration from the realms of hypothesis into the world of observed fact.

Our mid season study of the Arctic Skua colony, begun by Kenneth Williamson in 1948, was continued until 1962. The main objective of this study was to define the social structure of the population, its age composition, mortality, and breeding success. This involved colour marking almost the entire breeding population, recording progress at all the nests, ringing virtually all the young and keeping check until they were fledged. Far from being discouraged by all this prying into their private lives the birds thrived on it, increasing from some fifteen pairs in 1948 to an almost unmanageable seventy pairs in 1962. Several birds were breeding throughout these fifteen years ; one pair remained faithful for fourteen of them. No less than forty-nine birds ringed as chicks in the colony were recaught as first-time breeders between three and six years later. A vast quantity of data remains to be analysed, digested, and eventually published.

One early result of the study was the discovery that Arctic Skuas occur not simply in pale and dark colour-phases, but that many are intermediates (heterozygotes). These superficially resemble the dark phase, but can usually be distinguished in the field by the paler cheeks and nape, and in the hand by whitish bases to the feathers of the underparts. Most chicks can be readily assigned to one or other of the colour-phases, though the plumage characters are rather different from those of adults. The Fair Isle material provided the basis for a genetical study made by Peter O'Donald of the Cambridge University Department of Genetics for a Ph.D. thesis presented in 1961.

The observatory has continued to play its part in the nationally organised inquiries and censuses ; in improving standards of field identification and ringing instruction ; and in providing facilities and material for workers in many nonornithological fields. The variety of subjects, both esoteric and mundane, with which we and our visitors have been involved in the past six years is astonishing in retrospect. Flowering plants, mosses and lichens, insects and arachnida, littoral and freshwater life, have all been worked by their devotees ; the Fulmar's powers of flight have been scientifically observed and analysed, its oil supplied for medical research ; the ecology of the Fair Isle field mouse has been investigated ; place names have been listed and mapped, the local dialect tape-recorded ; the island's economic geography has been the subject of one thesis and is being resurveyed for another. This catalogue by no means exhausts the list of recent activities ; yet the possibilities for future investigation are almost infinite.

Last, but not least, we have provided good food and comfortable accommodation to scores of visitors who are not scientists or curious naturalists, but simply lovers of the open air and the remote islands. The happy combination of field research and recreation has justified the enterprise of those who founded the observatory, and merits the support of all who read this journal.

NOTES ON THE BIRDS OF BEARASAY, LEWIS

MICHAEL ROBSON and PETER WILLS

The rocky west coast of Lewis and Harris, which together form one large island, is broken into by several sea lochs. The widest and most northerly of these is Loch Roag. There are many islands in Loch Roag, but none apart from Great Bernera is permanently inhabited, and they diminish in size as the mouth of the loch is approached. On the margin of the open Atlantic, outermost of all, lies the islet called, in English, the Old Hill, on whose landward side, with about 500 yards between, is Bearasay. Since we have found no detailed mention of this island elsewhere, it may be useful to supply a description.

Because of its exposed position, Bearasay is difficult to reach, and the north-west wind, which often brings fine weather to the area, does not facilitate landing. Like the Old Hill, Bearasay is a large lump with sheer or nearly sheer cliffs all round, and a green top of weed and grass with rocky outcrops; its highest point is 175 feet above sea level, and its greatest length is about 200 yards. On the northern and western sides the cliffs are steep and overhanging, but those facing south are more broken, with weedy ledges and short slopes of thrift, and at one point a large gully filled with scree and boulders. At the east point, and again at the western tip, there is a separate stack or tower of rock; both of these, about half the height of the main island, have tops of lush weed, but neither looks accessible. The western one helps to enclose a sea pool at the foot of the Bearasay cliff and is therefore called Stac an Tuill, the rock of the sea pool. We do not know the name of the other, so that it will be referred to only as the eastern stack. From the summit of Bearasay, the view includes all the other islands of Loch Roag, the nearest one south being the very small and flat Floday. Beyond is the surrounding mainland of Lewis from the Carloway district to the Uig hills and the peaks of Harris. The Old Hill stands steeply to the north-west, and far out the main islands of the Flannans group are usually visible. At night the spark from the Flannan lighthouse is clear and at times there are also the lights of anchored fishing boats.

Bearasay has its place in local history. At the summit of the island is a small cairn. Beside it are the remains of a rectangular building, standing apart from another set of ruins at a lower level and near the edge of the cliff overlooking the sea pool. The second group consists of at least three structures, fitting closely together. The ground in this area is of loose, light soil covered with tussocks of thrift, and these have submerged the crumbling foundations. Elsewhere, between the rocks and brackish pools, there is a thin layer of firm turf, except along the edges of the cliffs where thrift tussocks again predominate. On the turf a circular foundation of, perhaps, a sheepfold is still visible, and the island, like most others of its kind, provides pasture for a few ragged sheep. A story has it that a pirate of standing, Neil MacLeod, once took refuge here and harried the seas, until he was forced to submit when his wife was captured by opponents, tied to a reef and threatened with drowning by the flow of the tide.

It is possible to get ashore at Bearasay in good weather at the foot of the cliff on the west side of the gully. A stiff climb up slabs and loose thrift leads to the top without great difficulty, except that of moving one's equipment, which has to be bulky because there is no shelter, no fresh water, and a stay may be prolonged far beyond expectations by a rapid change in sea conditions.

In making the following list of birds, we have been unable to draw much upon the experiences of other visitors. Apart from vague, general references to Loch Roag, the only information that we have found of real interest is that provided by Atkinson and Roberts (*Scot. Nat.* 1955: 110). They visited Bearasay and the Old Hill as well as Thars Sgeir, a neighbouring islet, and their comment is quoted below. Harvie-Brown says that he investigated the islands off the west of Lewis, but adds little more. We should be most interested to hear of any other first-hand accounts of this rewarding area. We certainly feel the need for much more information. The species here listed were those found in the first week of August 1962.

Leach's Petrel. This petrel is known to breed in large numbers on the Flannan Isles, their nearest station to Loch Roag. It was therefore impossible to avoid the hope that we might find them on Bearasay, particularly as local lobster fishermen thought them to be present on the island, and as Atkinson and Roberts had reported that, "On Bearasay the only place showing any sign or smell of petrel activity was in a group of ruined bothies on the cliff edge... Here, excavation uncovered two adult Leach's petrels, each in a definite chamber on a fresh nest pad, but neither with an egg. The much-branching burrow was excavated for 6 feet. There were several unoccupied nest chambers and side entrances; old rat droppings were also found, but no evidence of recent occupation. We returned to Bearasay later the same evening (6th June 1955) and spent the night ashore, but there was no further sign of petrels anywhere on the island." They also went to the Old Hill for an hour but found the ground unsuitable for petrels and no sign of a bird. Thars Sgeir likewise revealed no petrels.

During the night we spent on the island, a dozen flight calls of Leach's Petrels were heard, one of these from the ground near the solitary ruin. Only twice was a bird actually seen in the sky. In daylight we excavated at the ruins and around them but found nothing, and we cannot therefore say for certain that the birds breed on the island. As there was a bright moon, nocturnal activity may not have been at its best, and the birds found in the burrow in 1955 might have laid eggs well after 6th June. It is quite possible that a few birds do breed, but a longer stay on the island is required to prove this. Conditions are certainly suitable for a petrel colony.

Manx Shearwater. Gray ("Birds of the West of Scotland, including the Outer Hebrides," 1871) said that Manx Shearwaters were then to be found on Pabbay (south of Barra) and on St Kilda only among the Outer Isles. Clyne reported from the Butt of Lewis lighthouse ("Scot. Nat." 1915: 80), "one of these (Manx Shearwaters) was killed at the lantern in August 1910, and, as they breed in other parts of Lewis, may often pass unobserved." The vague indication of breeding in the area was not enlarged upon, and we have found no mention anywhere of a shearwater colony in the west of Lewis. Travellers to the Flannans, however, have reported shearwaters on the water in Loch Roag, and we ourselves saw several on our way to the Flannans in 1957. We therefore had them in mind on visiting Bearasay, although Atkinson and Roberts had said nothing about them after their landing in 1955.

While camping on Floday, a place of few birds, we heard the yelping cry of a single shearwater as it passed in the night. The next night, that of our stay on Bearasay, we found a large colony of shearwaters all along the eastern cliff face, and on either side of the gully. Birds were arriving frequently, and plunging into inaccessible ledges; it was impossible in the short time we had to estimate numbers. The area of activity did not seem to extend beyond the eastern cliffs, but might include the two stacks. Arrivals did not begin till well afer dark—about 12.45 a.m., and movement ceased about 4 a.m. Investigation in daylight showed that the nesting burrows were in parts not easily accessible without a rope, the lack of which prevented us from further discovery. It would seem, nevertheless, that Bearasay supplies the colony which was felt to exist in that area.

Fulmar. This bird, sometimes called in Lewis the St Kilda Gull, is not common among the Loch Roag islands. There is a small colony on the west side of Great Bernera, and a pair or two haunted a creek on Floday. We counted 6 to 8 pairs on a recessed part of the cliff on the north side of Bearasay, and several pairs were nesting on the cliffs above the sea pool opposite Stac an Tuill.

Cormorant. Harvie-Brown ("A Vertebrate Fauna of the Outer Hebrides") said in 1888. "At the present time it (the Cormorant) is looked upon as rare in Loch Roag, Lewis, whatever may have been the case formerly." Gray reckoned that there were not many in the Outer Isles, perhaps a few in the eastern sea-caves of Lewis and Barra. We have found no other significant mention of this bird in our area.

Bearasay, however, provided a Cormorant colony of considerable size. Our visit being in August, we were unable to estimate the exact extent of breeding, but we counted 26 nests in such condition as to suggest recent use, and there were many adult and young Cormorants standing around their nesting area, which was along the edge of the eastern cliff eastwards of the gully top. Large pale slabs of stone whitened by the birds made the colony conspicuous from a distance. On our approach during the day, adults and young would retreat along the cliff edge and then fly down to the water or away towards Floday, but at night it was possible to come quietly into the colony and sit beside sleeping birds within stroking distance. Cormorants may also breed on the eastern stack, which turns the slope of its summit away from Bearasay.

Shag. This bird was present in small numbers, chiefly on the two stacks, but also near the Fulmars at both their nesting sites. They evidently bred.

Great Black-backed Gull. A pair stood on Stac an Tuill and may have bred there.

Herring Gull. This bird was in evidence over Bearasay itself and on the stacks. Two or three pairs may have nested.

Black Guillemot. Two birds floated on the sea off the north-eastern part of the island.

Rock Pipit. Three pairs occupied different parts of the top of Bearasay.

Bearasay is probably too small to have any Wheatears, which were present on Floday as well as on the larger islands in the loch. Oystercatchers were also on Floday, but not on Bearasay. One evening on Floday, two Ravens, which had apparently nested on the island, were seen flying over towards Bearasay. Guillemots and Razorbills might well have nested on the stacks, but we saw none. Another bird which may well be found to breed on Bearasay is the Storm Petrel; the jumbled stones in the gully are a likely spot, although no sound was heard either there or in the ruins.

Atlantic seals were present in the sea pool and below the eastern cliffs, but were far more numerous in the creeks of Floday. Rats, whose traces are mentioned by Atkinson and Roberts, did not show themselves on Bearasay, but were found on Floday and other islands, where they may have destroyed some burrow-breeding birds. Their influence upon wild life in the area, including Bearasay, may be extensive.

We have had to be approximate in our records of the birds on Bearasay—a result of our lack of time—but we hope that the attractive nature of the island to ornithologists is apparent, and we wish to express our gratitude to the people of Bernera who helped us to get there.

BIRD WATCHING ON THE YTHAN ESTUARY

G. M. DUNNET

Scottish bird watchers are probably not generally aware of the attractiveness of the Ythan Estuary as a birding area. The greatest assets of this estuary are its small size coupled with a wide variety of habitats. The tidal part of the river extends only about 4 miles from the mouth, ending at the Logie Buchan bridge; and though the estuary may be up to 600 yards wide in some places at high tide, the channel is a mere 20 yards wide at low water. This contraction leaves exposed a big area consisting of pure sand, gravel beds and mudflats with all intermediate states and combinations, the invertebrate fauna of which provides rich food for birds, mainly ducks and waders.

The Ythan lies only 13 miles north of Aberdeen and is readily accessible by bus or car. On the right (west) bank is the village of Newburgh, and the road follows the estuary along the very edge of the water for much of its length. As a result many of the birds, notably the Eider, Shelduck and waders, are accustomed to people and their vehicles and are remarkably tame. This tameness together with the small size of the estuary means that observers can usually see the birds at close quarters. Across the water from Newburgh, and forming a wedge between the river and the sea, is the Sands of Forvie Nature Reserve, with a variety of breeding birds including terns, gulls, Eider, Shelduck, Fulmar and Red Grouse.

At the mouth, the estuary is bounded by extensive sand dunes, which in summer are the home of many hundreds of terns of four species—Sandwich, Common, Arctic and Little. The number of Sandwich Terns fluctuates markedly from a few tens to several hundreds of pairs from year to year; the Common Tern is most numerous, the Arctic less so, while the Little Tern is scarcest, breeding along the foreshore and not in the dunes. These terns feed up and down the estuary, following the shoals of sile, and often roost in compact flocks on the exposed gravel-beds or on the sandy foreshore. Situated within the busy ternery is a colony of Black-headed Gulls, and the confusion of activity and sound in the area during May and June is tremendous. A few isolated Eiders nest here too and a solitary pair of Stonechats breeds each year among the whins near the lifeboat shed.

Further upstream the sand gives way to gravelly patches, on which mussel-beds have become established, and to extensive mudflats, though sandy areas occur here and there. The mussel-beds retain many small pools at low tide with marine worms, periwinkles, various amphipod crustaceans and other creatures in abundance. These are the main feeding grounds of the Eiders, which are greatly concentrated on them at low tide, and of many species of waders. On the mudflats, rich in a burrowing species of amphipod, and in snails, which are present frequently in thousands per square metre in the muddier parts, Shelduck can be seen spaced out in pairs on their territories throughout the spring. Oystercatchers find cockles in the sandier areas, and flocks of wintering waders, especially Knot, Dunlin, Golden Plover and Redshank, feed on the mud at low tide. Near the tidal limit of the estuary is a very attractive reed-bed, sheltering the elusive Water Rail, and Sedge Warblers in season, and providing the roost for thousands of Starlings each autumn.

It is difficult to say which season is the most interesting. In winter, waterfowl are the chief attraction. Some two thousand geese—Greylag and Pinkfoot being nearly equally abundant—make the estuary and neighbouring lochs their headquarters, and ducks in considerable variety abound. On the river, Scaup, Goldeneye and Long-tailed Duck accompany the remaining Eiders, usually with hundreds of Wigeon, while the lochs abound with Mallard, Wigeon, and Tufted Duck, with smaller number of Goosander and Pochard. Occasionally Red-necked Grebe and Smew occur on the lochs in early winter. Red-throated and Great Northern Divers are common on the sea, and usually appear in the estuary from time to time. Flocks of Common and Velvet Scoters lie off the river mouth, and some of these birds come in too.

Spring seems more a season of arrivals than one of departure: we tend to miss the exodus of the ducks and geese, which linger on until mid April. Terns arrive, Shelduck continue to increase, and the great influx of Eiders goes almost unnoticed: the return of warblers, Swallow, Swift and martins is more conspicuous. Late spring and summer are much more exciting and the river is then teeming with bird life. The young Eiders begin to appear in late May and during June and July and form crèches of over a hundred young birds. Up to a couple of thousand may be on the river at one time along with their mothers, and this is a strong attraction to large numbers of Herring Gulls and some Great Black-backed Gulls which come and prey on the ducklings. Drake Eiders have little to do with all this, and during June they gather in hundreds at the sand-bar near the mouth of the river, still in their full plumage, before moulting into eclipse and going to sea. The Eiders nest on the moorland of the Nature Reserve—in pure stands of heather and rushy and grassy places. In early spring large rafts of adult Eiders display and call on the river, and in April individual pairs can be seen flying up on to the moor to select nest sites and to begin laying. At the height of incubation it is difficult to walk over much of the Sands of Forvie without disturbing or even treading on the incubating ducks.

The terns are now feeding in large numbers in the estuary, as are the Black-headed Gulls. Waders still occur—many of them presumably non-breeding birds. Chief among them are Oystercatcher, Redshank, and Ringed Plover, though odd Knot and Turnstone can be seen at any time. Oystercatcher, Lapwing and Ringed Plover nest commonly round about, but no young of these species are ever seen on the estuary.

This busy summer season merges almost imperceptibly into autumn, which is one of the best times of year. Waders, at first mainly passage migrants, arrive back from their breeding grounds in considerable variety. On Sunday 19th August 1962, for example, I went out for a short walk with children and dog—not the best circumstances for bird-watching—and with a high tide the meadows along the Tarty Burn were alive with waders. I identified Oystercatcher, Lapwing, Ringed Plover, Golden Plover, Turnstone, Snipe, Curlew, Bar-tailed Godwit, Green Sandpiper, Common Sandpiper, Redshank, Spotted Redshank, Greenshank, Knot, Dunlin and Ruff—a total of 16 species without really trying! I had seen Whimbrel on the river the previous day, and other regulars in the estuary are Grey Plover, Curlew Sandpiper and Black-tailed Godwit in small numbers, and Sanderling in small flocks at the river mouth. At this time too Arctic Skuas appear and spend some hectic days harrying the terns all over the river before passing on south. Occasionally Great Skuas visit the Ythan too. Given an easterly wind at this time many migrants land up on the Sands of Forvie Nature Reserve or in the patches of trees around Newburgh. Red-breasted Flycatchers, Blackcaps and Black Redstarts are fairly regularly detected, and large numbers of Goldcrests, Fieldfares and Redwings arrive on the Reserve every year, and flocks of Snow Buntings regularly overwinter on the dunes. Gradually the wader flocks increase, the terns go, the geese arrive, and we begin to think of winter again.

Few places provide the ornithologist with such a sense of intimacy and satisfaction. With even a few regular visits one can get to know the area very well, and by watching the tides can predict where the birds are likely to be. For a relatively small cost in time and effort great rewards of pleasure and accomplishment may be had.

SHORT NOTES

SHEARWATER MOVEMENTS IN THE OUTER HEBRIDES

During the course of two weeks spent in the Outer Hebrides in the second half of August 1962 regular sea watches were made in all areas visited. Shearwater movements were the principal feature observed, and an account of these is given below. The two sea areas covered by the observations were the Minch and the Atlantic coast.

Sea watches in the Minch were made on a sea crossing to Stornoway on 13th August ; from Port of Ness, Lewis, on the 16th ; and from a steamer travelling from Lochmaddy to Lochboisdale on the 29th. On the first two occasions the wind was NE, but on the third it was SW. This may have caused the passage on the 29th to take place further out into the Minch, but on all three occasions the observations were similar—a random movement of Fulmars, and a predominantly northward one of Manx Shearwaters.

Observations on the Atlantic coast were made from Uig in West Lewis on 15th August ; from Eoropie, Butt of Lewis, on the 16th ; and from the Ard an Runair peninsula in North Uist from 23rd to 28th. The sea watches at Eoropie and Uig revealed very little movement, for which the easterly winds during the first week may have been to blame. Those made at Ard an Runair, however, had the benefit of westerly winds, and produced more interesting results.

Ard an Runair is a peninsula jutting a mile out into the Atlantic from near the village of Tigharry. Heavy sea passage of Fulmars and shearwaters was seen each day—nearly all the birds going southwards this time. The heaviest movements occurred with NW winds, on the 24th when the shearwater count reached a maximum of 387 in an hour, and on the 27th when up to 100 passed in an hour. Five Great Shearwaters and a single Cory's Shearwater were seen during these six days, but only two Sooty Shearwaters.

The Cory's Shearwater was seen on 23rd August 1962, moving south about 300 yards out, rather closer than the majority of shearwaters, and watched through a x60 telescope in good light. It was a distinctly large shearwater, general colour sooty grey-brown and markedly paler than a Manx ; underparts white, the darker colour of the crown merging gradually with the white of the throat ; bill noticeably large, and pale ; flight of normal shearwater type, but appearing somewhat heavy when it flapped—which was only once or twice during the time it was in sight.

Although these observations of shearwaters are limited it seems reasonable to conclude that the passage in the Minch is of a different character from that along the Atlantic coast. Probably only a small proportion of the Atlantic movements at this time of year penetrate into the Minch. With the exception of six Sooty Shearwaters seen from Port of Ness on the 16th it is believed that most of the shearwaters seen in the Minch were dispersing northwards from breeding grounds in Hebridean waters. By contrast, the passage observed on the west coast probably reflects widespread Atlantic movements.

P. J. K. Burton, Jennifer M. Burton.

(Notes on autumn movements of shearwaters in North Sutherland and Easter Ross were published earlier this year (*antea* 2: 304), and attention is also drawn to J. H. Phillips' recent paper on "The distribution of the Sooty Shearwater around the British Isles" (*Brit. Birds* 56: 197). The record of Cory's Shearwater is the fourth for Scottish waters and first for the Outer Hebrides. Other noteworthy birds included a pale-phase adult Long-tailed Skua seen on the crossing from Kyle of Lochalsh to Stornoway on 13th August 1962, and two adult Ortolan Buntings near Eoropie, Butt of Lewis, on the 16th, the first record of this species in the Outer Hebrides other than St Kilda.—Ed.).

GREEN-WINGED TEAL IN INVERNESS-SHIRE

On 5th February 1963 while counting a flock of Teal in the Moray Firth just east of Inverness I noted a drake Green-winged Teal *Anas crecca carolinensis* among them. From forty yards I was able to note the white vertical mark in front of the wing, the lack of a white stripe on the scapulars, the lack of a yellow line separating the green and brown head pattern, and the darker buff breast. The white mark was an excellent field character, and I was able to identify the bird with ease at 400 yards range.

Later in the morning I found it feeding on the mud with four Teal, one of them a female, but it was impossible to determine this bird's race. Next day I found the Green-winged Teal in the same area, and it was seen again from 19th to 22nd, but not after this. I previously saw a drake Green-winged Teal in Hampshire in February 1955.

R. H. Dennis.

(This is the fifth record of this American race in Scotland and the first for Moray and East Inverness.—Ed.).

SNOW GEESE IN PERTHSHIRE

Two Snow Geese were first seen by John Craig, Jnr., a few days before 21st January 1963 keeping company with a flock of Grey Lag Geese in the neighbourhood of Comrie .They were seen regularly in the same area until 10th February, when large numbers of geese deserted the area as a result of the hard weather. Relatively few geese returned with the thaw and the Snow Geese were never seen again in spite of much searching.

I saw these birds on many occasions, and twice I was able to watch them only a few yards away. One (ringed on the right leg) was slightly larger than the other (ringed on the left leg), and they constantly kept together as a pair. They were quite certainly fully adult, with snowy white plumage broken only by the distinctive black wing-tips. In size they were only a little smaller than the Grey Lag and this, coupled with the absence of any grey patch on the red bills, rules out the possibility of their having been Ross's Geese. I believe that they were Lesser Snow Geese as they did not look coarse enough in the beak, head and neck for Greater Snow Goose.

J. Ralston Crawford.

On 3rd March 1963 I found two Snow Geese feeding with a flock of 100 Grey Lag in stubble fields by Drumatherty Farm, near Spittalfield. They kept together as a pair on the outskirts of the Grey Lag flock and they were noticeably smaller and less stocky than their companions, being more the size of a Brent Goose. Their plumage was a dirty-white colour, and the black wing-tips were a conspicuous feature in flight and could be seen even when the birds were on the ground. The bills appeared to be blackish, and not pink.

R. Job.

(Only 21 days and 24 miles separate these two records. There must, therefore, be a strong likelihood that they refer to the same individuals. There are discrepancies between the descriptions—notably as to size, body colour and bill colour—but these could be accounted for by different conditions of observation. It will be noted that the Comrie birds were ringed in exactly the same way as the two geese seen in Galloway during the 1961/62 winter (*antea* 2: 307). Again there is a discrepancy in that the Galloway birds were described as having a grey patch at the base of the bill which was definitely observed to be lacking in the Comrie birds, but even so it is hard to believe that there are two pairs of Snow Geese going round Scotland wearing exactly the same combination of rings. The association with Grey Lag Geese is another feature common to all these records and also to a further record of two "white geese" seen near Carsebreck on 29th October 1962 (*antea* 2: 313).

The fact that these birds were both ringed makes it almost certain that they had originated in captivity, even though it is known that Snow Geese have been ringed intensively in America. The problems inherent in the field identification of the two races of Snow Goose and Ross's Goose are therefore further complicated by the possibility of hybridisation in captivity between these geese. It seems fairly clear that these records do not refer to the Greater Snow Goose, but the many experienced observers who watched the Galloway birds were unable to reach any clear decision on their identity, and the two latest records must also be regarded as inconclusive although the Comrie birds do sound very like Lesser Snow Geese.

The general position as regards the likelihood of escapes from captivity was discussed in our comments on the Galloway records. Since then we have received some further information from Dr John Berry, who informs us that he has a number of hybrid Snow Geese at Tayfield, a few of which might be mistaken for pure Snow Geese although in fact they all have some aberration in plumage, varying from a few black secondary or tertiary feathers or coverts in the wing to a more or less piebald appearance. One of these was shot on the Tay near Dundee during the 1962/63 winter.

Dr Berry also quotes from a letter which he received in March 1963 from Lord Dundee, who keeps a collection of wildfowl at Birkhill, near Gauldry, on the Firth of Tay: "Two of my full winged Lesser White Snows have left the sanctuary lately. One is a last year's gosling, ringed ... The other is a year older hatched in 1961. But I do not think the older bird is ringed at all ... The younger bird is not yet in full plumage and its back is still half grey, so it should be easy to identify." It would be an easy matter for these birds to have moved to either Comrie or Spittalfield (both of which lie within 30 miles of Birkhill) but Mr Ralston Crawford's description of the Comrie birds (which were both ringed) as "fully adult" would seem to rule out the possibility of these birds having escaped from Birkhill. The only thing one can say with any confidence is that the balance of probability is heavily against a wild origin for the birds concerned in these two latest records.—Ed.).

GOSHAWK IN DUNBARTONSHIRE

While out for my morning walk on Duncryne Hill on 20th November 1962, I saw a powerful-looking hawk travelling towards me at a height of about 400 feet. The long tail was a conspicuous feature, as was the flight action which consisted of a series of wing beats and glides. The bird passed right over me and I saw an outline of rounded wings, ragged with projecting primary tips, and underparts pale and barred all over. In outline it was like a very big Sparrowhawk, and I have no doubt in my mind that it was a Goshawk. I could get no impression of the colour on the upperparts, but I think that this may have been the same bird as I saw a few days before attacking a Hen Harrier on the nearby Gartocharn Moss, and I then had the impression of brownish upperparts. In size the bird appeared to be larger than a Peregrine, though its shape was, of course, entirely different. Apart from the fact that my bird had its tail closed, its outline was very close to that shown in the sketch of the adult Goshawk soaring in *The Handbook of British Birds* (4: 73), and the markings were as definite as those shown in the sketch.

TOM WEIR.

On 25th November 1962 we saw a very large hawk flying low over marshy ground at Gartocharn Moss on the south side of the Endrick Mouth. At first we took it for a Sparrowhawk, as it had the characteristic flight action of a few wing beats followed by a glide, but we soon realised that it was much too big. It settled on a fence post and we could see that the underparts were whitish with no trace of buff, and that the mantle and wings were brown with darker brown on the primaries. At a range of 400 yards it was not possible to make out any more details but we had the impression of a whitish stripe from eye to ear coverts.

A "ring-tail" Hen Harrier was hunting in the vicinity, and whenever it came too near the Goshawk, the latter would attack it and the two birds would spar in the air. On every occasion it was the Goshawk that was the aggressor. The considerable wing span of the Goshawk could be compared with that of the harrier when they were sparring. On one occasion the two birds settled on fence posts only 40 yards apart. The harrier then looked the larger bird, though it may have been partly due to the hunched attitude adopted by the Goshawk. It seems worth adding that Sparrowhawks normally hunt this beat quite amicably with the harriers.

The Goshawk was again present when we re-visited the area on 13th January. On this occasion the bird was first seen perched high in a birch tree, and from a distance its size suggested Buzzard. As we got closer, however, it began to look too pale underneath and about the head, and when it left the tree it dropped with a shrike-like swoop and flew off with the characteristic flight action about 10 feet above the ground. It flew off to another tree where we had an excellent view in good light. The long, strongly barred tail could be clearly seen and the upperparts now appeared quite a russet-brown colour.

M. FORRESTER, DONALD STALKER.

(This is the first recorded occurrence of the Goshawk in

Dunbartonshire. Presumably these observations refer to the same individual, though it is worth drawing attention to the fact that, whereas Mr Weir's description of the barred underparts leaves no doubt that his bird was an adult, the description of the upperparts as "russet-brown" in the second note is more suggestive of an immature bird.—Ed.).

RED-FOOTED FALCON IN ORKNEY

On 8th May 1962 my wife and I were driving through rough heather pasture in Stromness Parish on the Mainland of Orkney when we saw a small, long-winged hawk alight on the heather by the side of the road between 25 and 35 yards from the car. For a few moments it stayed there, giving us a good side-on view, and then it flew up and over the car and disappeared. It could not be found again in spite of an exhaustive search.

In profile it looked slightly bigger than a Merlin but slimmer than a Kestrel—both species with which I am very well acquainted. The feature that immediately caught our attention was the brilliant red colour of the feet and legs. The upperparts were dark with a distinct brownish tinge to the upper back and perhaps also about the head, which was turned slightly towards us. There were dark bars on the back and the tail. The underparts were of a lighter brownish colour except for the throat and part way across the neck and upper breast, where the colour was cream or creamy-buff. We were not close enough to see whether there was any red colouring about the eyes, but there could be no doubt that the bird was a female Red-footed Falcon. This is the first record of the species for Orkney, and it coincided with a spell of easterly winds which brought in a number of other migrants, including an Osprey.

R. Bremner.

CRANES IN FIFE, INVERNESS-SHIRE AND LANARKSHIRE

Two Cranes were present at Dunbog, near Newburgh, on 27th June 1962. They were first seen at 10.30 a.m., but I suspect that they had been in the neighbourhood since the previous evening as my own captive cranes had been very excited and had called a lot during the night. I saw them first as they sailed overhead above some beeches, calling a flamingo-like grunt (which I have never heard my captives make and which does not correspond with any note described elsewhere), and landed in a field adjacent to my crane paddocks. They were not particularly wary and walked to within about 20 yards of a roadway, where they showed really very little concern for a van which was passing. With this in mind I drove down to them with the hope of getting some photographs, but unfortunately by the time I had made all the preparations they had wandered more than 100 yards into the field. However they were near enough for me to be able to examine them critically with 15x binoculars.

Both were without any trace of the brown-buff juvenal plumage, and in both the dark slate and white neck patterns were fully developed though with less distinct margins than in the full adult plumage ; the dark part was less dark than in the adult plumage, though the intensity of the dark stripe varies greatly in different individuals from dull black to mid-slate. The curved, extended, disintegrated inner secondaries and humerals were not developed, but in one bird (the bigger of the two) a patch of greater secondary coverts, with the tips of the inner secondaries just beginning to show, was growing in and showed as lighter, greyer and less sooty-tinged than the rest of the plumage. Neither bird showed the sparsely bristled crown patch ; both showed dark juvenile irides.

They allowed me to approach within about 150 yards before taking off. They flew off for about half a mile and then returned, sailing close overhead to land in another field which had been cultivated in preparation for sowing rape and was bare earth. In the expectation that they would walk up to the boundary fence that separated them from my captive cranes, I strewed wheat in a long line over the approach. However they ignored this offering and came right up to the netting where they preened and dosed and ate small clods of earth, while the pair inside demonstrated aggressively at them. They seemed very tired and this, together with the absence of the usual whitish powdery bloom, convinced me that they were newly arrived from a long flight. They stayed for two hours and then, without being disturbed, they flew off to the north-east, sailing and circling in a stork-like manner.

I am convinced that they were both two-year-olds, *i.e.* hatched in 1960. Although I have not yet bred the European Crane *Megalornis grus,* my experience with other members of the genus has shown me that extensive relics of the buff juvenile plumage are retained until the second autumn, and that the extended inner secondaries do not develop until the third autumn.

At the risk of seeming very uncharitable I would like to comment on the infelicitous figure of the species Lodge has made for Vol. XI of Dr Bannerman's *The Birds of the British Isles*. The illustration in *The Handbook* is much happier and also shows the variation in body colour and in the amount and extent of the black markings on the inner secondaries and coverts which occurs in both the typical race and *M. g. lilfordi* (if this subspecies is in fact a valid one, which I greatly doubt) and is independent of sex or age and seems to be fixed in each individual. Worst of all, Lodge shows the Crane to have a bright ruby eye. This is completely wrong and I can only think he must have copied it from the specimen mounted in the Royal Scottish Museum*. The only crane with a red eye is the Demoiselle *Anthropoides virgo*—ruby red in the male and topaz in the female. In *M. grus* the iris of the adult male is a very, very pale straw colour—almost silver—while that of the female, though a little more variable, is much darker and is just plain straw colour infused with a biscuity tint. The young have dark eyes and I do not know when the light colour is developed. It seems likely that they are not sexually mature until five years old, so there is plenty of time for this colour change after two years old. The red crowns in both illustrations have slipped back badly, though this can be explained by faults in the taxidermy of the models. The bare crown is not so extensive nor so brilliant a red as is usually figured, and I feel that some of the illustrators may have had the Manchurian Crane *M. japonensis* in mind when they coloured their pictures. In this species, of course, the patch is quite naked, coarsely caruncúlate and bright sealing wax red.

*Since writing this I have seen a single specimen at Vincennes Zoo in Paris which had a ruby-topaz eye. This is the first aberrant specimen of which I have heard, although I must have seen over a hundred captive European and Lilford's Cranes.

TOM SPENCE.

In mid July 1962 a telephone call was received at Inverness County Police Headquarters from a Mrs Girvan of Corriemony, Glen Urquhart, asking if there had been any reports of straying storks, as two very large birds were in fields near the farm house. From her description I was able to suggest that they were probably Cranes, but unfortunately it proved impossible to visit the area before the birds left.

From Lindsay Girvan I learned that they were first seen on 23rd June, and had remained in the flat fields near the R. Enrick at Corriemony until 27th July, when they left and were not seen again. He described them as two large, slow-moving birds, 3½ feet high; slate grey, with body like turkey, long neck, large beak, black on neck and throat; neck and body in straight line in flight; large high tail bent back in curve; thin legs.

The birds fed in the grass fields and were very wary, so that they could not be approached nearer than 200 yards. They stayed during the afternoons but went to another farm at night. When I showed the *Field Guide* to the family they all pointed to the Crane as the bird they had seen. The birds were also seen by J. D. Michael, retired from the Indian Railways, who identified them as similar to cranes seen by him in India.

James MacGeoch.

Hearing that two strange birds resembling emaciated turkeys had been seen near Carnwath since 30th September 1962, my daughter and I went in search of them on the afternoon of 7th October. We were taken to a large stubble field, at one edge of which was a marshy patch, but the birds were not there. As we were on the point of leaving, two huge birds appeared over the woods and were obviously intent on landing until they saw us. They had long, fully-extended necks, and long trailing legs. They were grey in colour, except for very noticeable and well separated black "fingers" at the wing tips. As they were flying into the sun we could not see the colour of the head and neck, but even so had no hesitation in identifying them as Cranes.

Early next morning, on the way to their usual haunt, we suddenly saw them in the air. As we got out of the car, they landed in a grass field not 300 yards from Carnwath. Their landing was a splendid sight, reminiscent of storks landing on chimney pots. They alighted right alongside a sheep which, not unreasonably, looked a little surprised, and provided an interesting contrast in shape and size. We had excellent views, and the black head and neck, and the white stripe on them, were clearly visible, though it was difficult to make out the red patch on the crown. The wings when ruffled looked like outsized feather dusters. We tried to approach them, and succeeded in getting to within 250 yards, when they were put up from the opposite direction. They flew off low with a very direct flight and landed about two miles away. So far as I know they have not been seen in the area since.

Robert Erskine-Hill.

(These notes include the first records of Cranes in Tay and North Fife, and in Clyde and Lanarkshire. During summer 1962 two Cranes were also seen in Shetland around 20th May, on Fair Isle—the first documented record for the island—on 29th May (*Fair Isle Bird Obs. Bull.* 5: 12, 29), and in Aberdeenshire from 14th to 16th August (*antea* 2: 245); while a single adult was present on Fair Isle from 19th July to 28th August (*F.I.B.O.B.* 5: 45). The neat picture, ignoring this single bird, of just one pair of Cranes wandering about Scotland, is rather spoiled by the carefully checked overlap of dates of the Fife and Inverness-shire records. It is, however, clear from the plumage descriptions and from a drawing of the Inverness-shire birds submitted by Mr Girvan, that these two records refer to different birds. It is still possible that the other five records of a pair of Cranes, leaving aside the Fife birds, could all refer to the same individuals.—Ed.).

SPOTTED CRAKE IN KIRKCUDBRIGHTSHIRE

At 12.30 a.m. on 15th June 1963 W. Austin, D. Skilling and A.D.W. heard the peculiar "whip-lash" call (see *Brit. Birds* 53: 523) of a Spotted Crake from a marsh in Kirkcudbrightshire. It was a brilliant, calm night and the call first attracted our attention at a range of about $\frac{1}{4}$ mile. We approached until at about 30 yards the note, repeated without variation at intervals of a very few seconds, became astonishingly penetrating, and the "crack of the whip" at the end of each whistle clearly audible. All three of us remarked on the resemblance to a whip crack, but at long range the main impression was of a liquid staccato whistle urgently repeated again and again.

From familiarity with an excellent Swedish recording, A.D.W. was able to recognise this as without doubt the call of a Spotted Crake. Later the same night all three of us listened to this recording and the identification was agreed. The following night the bird eluded efforts to tape-record it by remaining silent—conditions were cooler and showery. But on 16th June Sir Arthur B. Duncan and A.D.W. heard it again for about an hour from 10.30 to 11.30 p.m. A.B.D. also listened to the Swedish recording afterwards and was in full agreement with the identification. On this second occasion the call was rather more intermittent and slighly further out in the marsh. Subsequently a number of visits to the marsh were made at and after dusk, usually without result, but occasional calls on 19th June and 5th July showed that the bird was still present. The very dense growth of sedge, reeds and other marsh plants renders the chances of seeing it rather slim. The season at which it has been heard, and perhaps also the tendency for the call or "song" to fall off recently, suggest that a breeding pair may well be present.

For a number of years I have sought this species in the neighbourhood, for its previous history in Galloway is intriguing. According to Robert Service it was often shot towards the end of the 19th century; it had been found breeding in Dumfriesshire, and Clark-Kennedy told Harting that he had taken the nest in Kirkcudbrightshire (*Ann. Scot. Nat. Hist.* 1896: 123). The last known breeding in Scotland was in 1912 when Abel Chapman found a brood in Roxburghshire. According to *The Birds of Scotland* there have been a number of autumn and winter records for Dumfriesshire and there are also records for the other counties in south-west Scotland.

But in 1948 A.B.D. knew of no recent records for Kirkcudbrightshire, and I do not know of any if we exclude a bird seen near Castle Douglas in mid February 1958 by Professor M. F. M. Meiklejohn, F. D. Hamilton and me. This record was not published because we could not be absolutely certain, at that season, that the bird was not a Carolina Crake (see *antea* 2: 219).

It is right to be cautious about identifying a scarce bird by call alone, but all who heard this bird agreed that the sound was quite unmistakable. It is hardly necessary to add that there is always hope of seeing the bird or birds in another season, if not this, for it may well be that the Spotted Crake occurs more often than is suspected.

A. DONALD WATSON.

GREAT SKUA BREEDING ON ST KILDA

During June 1963 I spent two weeks on St Kilda with a National Trust for Scotland working party. On my way to the tunnel at Gob na h'Airde in Glen Bay on the 9th, my first day there, I noticed a Great Skua being harried by a Great Black-backed Gull. This seemed unusual, as the Great Skua is recorded as only an occasional visitor in July and to the surrounding seas in October (*St Kilda Summer*).

On my way back from the tunnel I found the bird still in the same area, and thought it might be nesting, so I climbed a hill and waited. After 20 minutes and two further visits to the spot it settled, and I was able to find the nest. It was typical of those I had seen on Fair Isle on a previous visit and contained two eggs.

I visited it again a fortnight later but the eggs had not yet hatched. Both birds were present, and much more aggressive than before. The nest was not far from colonies of Great and Lesser Black-backed, and Herring Gulls. This is the first record of breeding on St Kilda.

KERR POLLOCK.

(This represents a further extension of range in the remote north and west of Scotland for the Great Skua, which has increased very greatly following protection in Shetland especially. It has in recent years been recorded breeding in the Outer Hebrides other than St Kilda, actually in Lewis (*Scot Birds* 1: 124, 156, 259), and on the Scottish mainland in Caithness (*Brit. Birds* 46: 262; *Scot. Nat.* 1955: 105).—ED.).

ARCTIC REDPOLLS IN INVERNESS-SHIRE

On 4th January 1963 I stopped my car by the Caledonian Canal at Tomnahurich, near Inverness, to look at a Goldfinch on the fence. It flew down to a patch of nettles and landed beside a small group of redpolls. One was a normal Lesser Redpoll *Carduelis flammea disruptis,* but the other two were Arctic Redpolls *C. hornemanni.*

The redpolls were so tame that I was able to approach within a few yards as they fed on the nettle seeds. The Arctic Redpolls were very pale, with unstreaked white rumps very obvious in flight; underparts very white, and upperparts much paler than Lesser Redpoll, with a marked frosty appearance on the shoulders; wing-bars white; both birds had crimson crowns; no pinkish flush could be seen on their breasts but the light was poor. The Arctic Redpolls appeared larger than the Lesser Redpoll, but their calls were similar.

From this field description I was not able to assign them to a particular race. I left them feeding on the nettles and they were still there just before dusk, but I could not find them on subsequent days. The weather, which had been frosty and snowy since 26th December 1962, became even more severe.

R. H. DENNIS.

(Taxonomists disagree about the classification of the redpolls and the validity of the various races and species; and the whitest examples of *flammea* may be inseparable from *hornemanni* in the field even under favourable conditions. Meantime it is considered desirable to record under Arctic Redpoll any birds which show the characters associated with *hornemanni,* and this record has been accepted by the Rarities Committee on this basis (see *Brit. Birds* 54: 238; 55: 582). There is no previous record of either race of Arctic Redpoll for Moray or East Inverness.—ED.).

CURRENT NOTES

(**Key to initials of observers :** R. W. Adamson, A. F. Airey, D. R. Anderson, D. G. Andrew, W. Austin, J. A. Bailey, Miss V. E. C. Balfour-Browne, I. V. Balfour-Paul, G. H. Ballantyne, J. Ballantyne (JB), Miss P. G. Baxter, A. Black, G. W. G. Boag, T. Boyd, W. G. Breed, J. Bremner (JBr), A. W. Brodie, R. G. Caldow, C. V. Chilcott, D. A. P. Cooke, H. G. Cree, Miss M. H. E. Cuninghame, W. A. J. Cunningham, N. P. Danby, P. E. Davis, R. H. Dennis, D. Dewar, A. A. Diack, E. Dicerbo, G. Dick, H. F. Dixon, H. E. M. Dott, Hon. H. Douglas-Home, Dr G. M. Dunnet, Sir R. Erskine-Hill, M. Everett, H. Fisher, Miss W. U. Flower, H. A. Ford I. M. Ford, R. W. Forrester, Miss E. M. Gall, A. G. Gordon, D. R. Grant, H. Halliday, S. G. A. Harper, A. H. Hazell, R. Hodkinson, J. A. D. Hope, J. Hoy, R. A. Jeffrey, Dr D. Jenkins, W. M. Johnson, J. Kerr, J. E. King, Miss H. Knight, J. Lockerbie, A. J. B. Loudon, J. G. Lyon, A. Macdonald, D. Macdonald (DM), Mrs M. K. Macduff-Duncan, Miss G. MacGregor, K. S. Macgregor, I. Maclean, Mrs M. J. C. Maclean, A. T. Macmillan, R. W. Marriott, W. Matheson, W. S. Medlicott, Prof. M. F. M.

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Unless otherwise stated all dates refer to 1963.)

Introduction

As a lot more information on the effects of the past winter has been sent in we are again devoting a section to this subject. Other sections deal with 1963 notes on distribution, some earlier records, and observations on a variety of general topics. Current Notes for the winter number should be submitted by 30th September.

Effects of the severe weather

The paradox of Current Notes is that by the time they are read they are no longer current—at best they are about two months old. The more up to date one tries to be with information and comment the more obvious this snag can be. When it was written, the section in the last number on *Effects of the severe weather* (*antea* 2: 369) was an adequate summary of the little information received; yet long before publication it was clear that more emphasis should have been given to the losses which people expected certain species to suffer and which were then being noted.

Even now it is not always easy to sort out the facts; because for every person who says that a species has been drastically reduced in numbers there seems to be another to report that there are as many as ever in his area. For example, **Bullfinches**—perhaps not birds to be severely hit by hard weather—are just not to be seen at Haddington (AM), whereas at High Valleyfield, Fife, both Bullfinches and **Goldfinches** have increased tremendously this year, though other species are down in numbers (JH).

Some effects are predictable. Resident species which did not move out from severely snowbound hill districts, such as the Moorfoots, fared worse than the same species on lower and more sheltered ground. Seed-eating and scrap-eating species do relatively well in association with man in his towns and farm steadings.

A complete survey has not been attempted, but a few notes on individual species may be of interest. Too few reports have been received about most of the scarcer local species to give an unbiased picture, so that these comments are largely confined to the commoner species, and especially to those where losses have been widely reported.

Lapwings were definitely hard hit, and this is reported from many places, possibly because this is a very conspicuous species. In Lewis they are conspicuous by their absence (WAJC); at the end of April the shortage of birds in Wester Ross was desperate—no Lapwings and very little else (TW); in south-east Sutherland numbers are probably down to about a third, with hardly any in some places but other areas much as before (DM); in the lowland districts of East and Midlothian they are fewer in numbers (AM), much reduced (ATM), much down and breeding in pockets, with a 50% or 75% reduction at Gullane Links (KSM), and have almost ceased to breed at Hillend where they were frequent before (JGL); they are down to about half their former numbers in the Lothians and Peeblesshire (TCS), and certainly down by half in the Moorfoots and the Tweed Valley in Peeblesshire (JB); one pair nested in an area in Fife where there were six in 1962, though 13 unpaired birds are also on the ground (GD); in south Berwickshire roughly one pair in ten remains (HD-H); in Kirkcudbrightshire numbers are much reduced, with birds absent or down to one in ten in some areas but almost normal in others (ADW), though another observer reports that in contrast to other parts of Scotland Lapwings are breeding fairly well in the county (AFA).

Snipe have become extremely scarce in the Gladhouse area; the first was not seen until 22nd April, and up to early July only three single birds had been seen, compared with 75 bird/records during the same period in 1962 (DGA, RWJS); in Peeblesshire Snipe have definitely been hard hit (JB).

Woodpigeons have apparently been affected rather patchily, but perhaps a high initial population makes it difficult to detect quite heavy mortality. Certainly in the woods round Coldstream the density of the population is astonishing (ATM), and the winter has not halted its progress (HD-H). The usual comment is that although numbers are down there are still plenty of pigeons about.

In East Lothian numbers of **Green Woodpeckers** are evidently down (KSM); two dead birds were found near Selkirk (AJS); and numbers are seriously affected in Berwickshire (HD-H); yet in Kirkcudbrightshire there is some evidence that there are even more than in 1962 (ADW).

The **Long-tailed Tit** is one of those tiny birds which one expects to succumb in hard winters, but reports are completely conflicting, possibly because it is not a particularly numerous species. In south-east Sutherland it is very much reduced

(DM); on lower Deeside none has been seen since the winter (DJ); in south Berwickshire it has been almost wiped out (HD-H). Yet there is no apparent reduction in East Lothian (KSM); they have come through the winter surprisingly well in Peeblesshire (JB); and they are as plentiful as usual in Kirkcudbrightshire (ADW).

Treecreepers have not been seen since the winter in parts of lower Deeside (DJ), though at least as numerous as usual at Glassel (DGA); are somewhat reduced in Peeblesshire (JB); and 90% wiped out in south Berwickshire (HD-H).

Opinion is almost unanimous in describing the **Wren** as one of the worst hit species. In south-east Sutherland it is very much reduced (DM); on lower Deeside only two have been heard since the winter (DJ); though it is apparently unaffected at Glassel (DGA); in many areas of the Lothians where Wrens were numerous last summer they seem to have been almost wiped out (ATM), and another observer suggests a 75% reduction in numbers (KSM); at Bush and Glencorse, near Edinburgh, it is almost gone from areas where it was abundant last year (NPD); at Gifford and in central Edinburgh Wrens are clearly very badly hit, even in the city, though they remain as common as ever at Cramond and Dalmeny (TCS); in Peeblesshire numbers are definitely much reduced (JB); in south Berwickshire they are 90% wiped out (HD-H); and they are much reduced and very scarce indeed in Kirkcudbrightshire (ADW).

Though still well distributed **Song Thrushes** are fewer in south-east Sutherland (DM); in East and Midlothian they are reduced but still there in fair numbers (KSM); in Peeblesshire they are down by well over half (JB); in Berwickshire numbers are seriously diminished (HD-H); and in Kirkcudbrightshire somewhat reduced (ADW).

Within four or five miles of Dornoch, Sutherland, 23 pairs of **Stonechats** were counted in 1961, when the population was considered to be very high; the 1961/62 winter made serious inroads on these numbers, and this has been continued in 1962/63 so that not one has been seen since (DM); in inland forestry plantation areas in Kirkcudbrightshire they are much down with only occasional pairs where there were a score in 1962—a year of abundance (ADW),

Goldcrests are unchanged in south-east Sutherland (DM); but much reduced at Glassel, Kincardine (DGA); 50% down in East and Midlothian (KSM); seriously reduced in Peeblesshire (JB); and almost completely wiped out in south Berwickshire (HD-H).

Finally, some detailed counts are available for an area on the outskirts of Edinburgh at Fairmilehead and Swanston. Numbers of all species were counted or estimated in 1962 and most interesting figures obtained by repeating the census in 1963. Of the larger ground-feeding birds the most affected were **Lapwing** (33 pairs down to 6 pairs), **Curlew** (8/3) and **Partridge** (9/6). Of the crow family only **Jackdaw** (20/15) was down. Small insectivorous woodland birds were badly hit, most notably **Wren** (13/3), **Treecreeper** (6/1) and **Goldcrest** (5/1), but **Coal Tit** (12/4), **Blue Tit** (44/25), **Great Tit** (12/6) and **Robin** (42/20) also suffering. **Mistle** and **Song Thrushes, Blackbird, Skylark** and **Meadow Pipit** all left during the coldest spell, being present at the beginning of January but certainly gone by the end of the month; they reappeared at the end of March and built up steadily through April to normal numbers by the beginning of May. **Greenfinch, Chaffinch, Bullfinch** and **Yellowhammer** stayed on and must have depended almost entirely on garden feeding on scraps and Swoop; all showed a slight decrease only. **Linnet** (68/16) was the one seed-eater to suffer; the birds probably moved out, as the stubble on which large flocks usually feed was under one to three feet of snow for two months. The pair of **Grey Wagtails** (1/0) went, and **Pied Wagtail** (9/6) decreased. **Corn Bunting** (6/4) and **Reed Bunting** (10/8), probably too shy to visit gardens, stuck it out in the fields. **Snow Buntings** usually winter in the fields, and about New Year there were 1000; in mid February they were found feeding on the tops of Allermuir and Caerketton where the sunshine had melted large areas of snow. **Kestrel, Tawny Owl, Hedge Sparrow, Starling** and **House Sparrow** stayed in the area and showed no decrease (HAF).

In time a fuller picture of the effects of the past winter on individual species will emerge for the country as a whole; it should, however, be remembered that these effects are not necessarily the same in all districts—the past winter was not much worse than average in some places—and particularly that it is the conditions in a bird's winter habitat that matter, not those on the deserted breeding grounds. And lastly, it is starvation, not the cold, that kills birds.

Distribution

This section deals with 1963 observations; earlier records are given in the following section.

Some comments are given on the arrival and build-up of summer visitors under species, but attention may be drawn here to a remarkably heavy late movement. Writing on 30th May PED reports that late May was quite good for migrants at Fair Isle, with more of the common warblers than at any time last year, and a good sprinkling of sub-rarities. Notes from the Bass Rock indicate a very substantial movement at that time; there was a striking passage of warblers on 25th and 26th, with over 20 **Willow Warblers,** two **Sedge War-**

blers, two or three **Whitethroats** and one **Lesser Whitethroat** on the latter date; on 6th June this late spring migration was still continuing, with Willow Warblers, Whitethroats, another Lesser Whitethroat, two **Swallows** and a cock **Brambling** (JBN).

In Gosford Bay, East Lothian, three immature **Great Northern Divers,** surprisingly scarce there, were seen on 18th April (HFD, TCS). A steady migration of **Red-throated Divers** in mid Forth was noted at Elie from 18th to 21st April (DWO), and one was at Corby Loch, Aberdeenshire, on 19th May but did not stay (DRG).

For the first time a pair of **Great Crested Grebes** bred and hatched out young at Peppermill Dam, Tulliallan, Fife (GD, JP). A **Red-necked Grebe** was seen at Aberdeen on 17th February (WGB), and in East Lothian between Gullane and and Gosford there were reports of two on 14th April (IMF), 12 in communal display on the 18th (HFD, TCS), one on the 27th, and two on 4th May (CT). A **Black-necked Grebe** was at Hallcraig, Aberdour, Fife, on 25th April (GD, JP), and one at Barr Loch, Renfrewshire, on 2nd and 3rd May (RGC).

In an hour on 19th May, 122 **Manx Shearwaters** were counted from Elie Ness, Fife, making their way down the Forth towards the Isle of May (DWO). Substantial numbers of non-breeding birds may remain in the mouth of the Firth of Forth during the summer, but there are tantalising local rumours that a pair may have nested during the past two or three summers on Craigleith, off North Berwick, where one was hanging about on the evening of 17th June. This bird has never been found breeding in the Forth, and as the man who says he found the nest will not show it to anyone it can only be regarded as an intriguing possibility (ATM).

Occasionally since 1958 odd **Fulmars** have been seen about the gable of a famous tenement with 27 chimney pots on a single stalk on Portobello Esplanade, Edinburgh; once there were about a dozen birds there, and on 13th June there were four, of which two flew up to the exposed fireplace niches in the wall and settled in them, one being fed by its mate; they had evidently been there for about a week, but seemed only to be prospecting (JBr), and there was no sign of them on 3rd July (ATM). Once again there are reports from various parts of Edinburgh, with single birds at the Royal Botanic Garden on 2nd April (JHS), Duddingston Loch—the first for the sanctuary—on 6th May (ATM), Merchiston Castle School, Colinton, on 26th and 29th May and 24th June (IVB-P, IMF), and Fairmilehead on 16th June (HAF). In Dunbartonshire one was seen from Ben Vorlich flying south over Loch Lomond on 23rd June (TDHM).

Two pairs of **Garganey** were flushed from flooded marshland at Caerlaverock, Dumfriesshire, on 12th April (JAB, ELR); a pair was on Rosslynlee Reservoir, Midlothian, on 22nd and 28th (DGA, RWJS); and there was a drake on a pool near the mouth of the Endrick on the 28th (WUF).

A June record of **Scaup** comes from Skibo on the Dornoch Firth, Sutherland, where there was a duck on the 11th (DM). Single drake **Goldeneye** were noted at Loch Garten, Inverness-shire, on 26th May (DWO), and at Seafield, Leith, on 13th June (CT), the latter just possibly the same bird that patrolled a short stretch of the lower reaches of the River Almond, West and Midlothian, from 20th April until 22nd May (TCS); two were at Gladhouse on 7th July, one previously having been seen intermittently on the Moorfoot reservoirs (DGA). Four pairs of **Velvet Scoters** were seen in the Sound of Gigha on 21st April; this species is distinctly uncommon on the west coast compared with the east (TDHM).

Further **Smews** are reported to add to those already noted (*antea* 2: 313, 376): one frequented the River Blane near Killearn, Stirlingshire, from 6th to 20th February, on which date a second bird was also present (AJBL); and there were single red-heads by the Tay Bridge on 17th February (CVC), at Threipmuir, Midlothian, on 31st March (CT), and at Barr Loch, Renfrewshire, on 10th April (LAU).

For what they are worth we may note single **Grey Lag Geese** at Tyninghame, East Lothian, on 12th May (CT), on the Eden Estuary, Fife, on the 18th, when it was thought to be a flightless bird (DWO), and 19th, and 16th June (CT), and offshore at Ballantrae Bay, Ayrshire, on 22nd June (RMR). Both "pricked" birds and free-flying domestic flocks make it difficult to assess such records. A lone **Bean Goose** was seen with large numbers of Pink-footed and Grey Lag Geese at Newburgh, Aberdeenshire, on 9th April; earlier observations of Bean Geese in the county have already been noted (*antea* 2: 376) (WGB, GMD). After the cold spell the "blue" **Lesser Snow Goose** (see *antea* 2: 377) did not return to Libberton, Lanarkshire, where it had last been seen on 11th November, until 9th March, by which time the thaw had finally set in; it was seen several times thereafter until 13th April (RE-H).

One **Barnacle Goose** was with the Pinkfeet at Tyninghame on 7th April (CT), and three were with Pinkfeet at Libberton on the 15th (RE-H). At Elie Ness, Fife, two **Canada Geese** were flying out towards the Isle of May on 7th April (DWO), and from 12th to 14th two consorted with eight Whooper Swans on the Clyde at Libberton (RE-H).

Single **Whooper Swans** were at Loch Raa, Coigach, Ross-shire, on 19th May (TDHM), and at Tyninghame on 2nd June (TB). There are further reports of **Bewick's Swans**. Six seen by Loch Ken on 17th March have already been recorded (*antea* 2: 378); on the 16th there was an adult with Whoopers near Stranraer, Wigtownshire, and on the 18th two adults at the Loch o' the Lowes, New Cumnock, Ayrshire (JGY).

A **Rough-legged Buzzard** was seen between Rogart and Lairg, Sutherland, on 4th February (DNW). A female or immature **Marsh Harrier** was seen on 5th May low over Forvie Moor, Aberdeenshire, causing an uproar among Black-headed Gulls and mobbed by Curlews (DPW); a similarly plumaged bird was present on Roxburgh Moor, Roxburghshire, on 22nd June (WMJ), and may have been there for a week and on the 23rd (per WSM). A "ring-tail" harrier, presumably a **Hen Harrier**, was at Loch Leven on 13th April (RWJS); there is no satisfactory record of this species in Kinross-shire.

The big disappointment of summer 1963 is the failure of both pairs of **Ospreys** on Speyside to hatch any of their eggs. The original pair duly returned to the Loch Garten eyrie and laid, but a disastrous gale disturbed the nest and the eggs were lost. It was hoped the birds might start again, but after building a frustration eyrie nearby they lost interest and moved away. Meanwhile a second pair had been discovered building an eyrie in an undisclosed area; later they abandoned this and built a nest at Inshriach on Forestry Commission ground and began incubating eggs on 12th May. One of the birds was carrying a ring on its left leg—probably placed there in Sweden where many young birds are ringed. The R.S.P.B. mounted a continuous watch at this eyrie also, and moved the public observation post to Inshriach when it became obvious that the Loch Garten birds were not going to lay again. Unfortunately the eggs never hatched, and these birds also lost interest. At the beginning of July the observation post had to be closed down as there was nothing for the public to see. An egg was taken under licence and is now being examined to determine whether it contains residues of toxic chemicals, or whether failure to hatch was due to the male bird's immaturity or some other natural misfortune (GW). An Osprey was seen at Girdle Ness, Kincardineshire, on 24th April; it was perching on a high rock by the sea and when disturbed flew slowly south into the Bay of Nigg, mobbed by two Crows and followed by hundreds of Common and Herring Gulls (AMT).

With numbers of **Peregrines** catastrophically reduced in England through accumulating toxic agricultural chemicals from the bodies of their prey, it is pleasant to note an apparently new eyrie, where no Peregrines were seen in the three previous years, at the south end of the Island of Bute on 27th May in a Raven's old nest (WW, BZ).

There was a lek of 19 **Black Grouse**, a large number for the area, near Gladhouse, Midlothian, on 7th April (DD).

The fact that a few reports of **Corncrakes** in southern Scotland seem worth mentioning indicates how scarce they have become there. Two calling, one from 21st May, near Dalry, Kirkcudbrightshire, both had unusually high-pitched voices (ADW); one was calling at Collin, Kirkcudbrightshire, on 15th June (AFA); one present for about a fortnight during May near Ayr (RMR); two calling from different fields near Gladhouse on 16th June, one on the 23rd, and others in the district, this being in fact the first record from Gladhouse (DGA, RWJS); and one heard at Ardeonaig, Loch Tay, Perthshire, during June—the first there for some years (per VMT). In Lewis the species seems to be on the increase, at least at Stornoway where it now nests within the town boundary. A pair of **Moorhens** nested successfully just outside Stornoway; this is a very rare breeding bird in Lewis (WAJC).

Though **Grey Plover** may be seen in summer at Aberlady Bay, one in breeding plumage on the West Lothian bank of the Almond estuary on 2nd June was interesting as the species is always scarce there (AWB). **Whimbrel** were passing over Gartocharn, Dunbartonshire, on 23rd April (TW), and one flew NNE over Morton Lochs, Fife, on the 27th (DWO), while other reports come from Forth: one at Gullane Point on 11th May (RM); three at Tyninghame on the 12th (JADH); one flying north over Craigmillar on the 15th (JEK); one each at Peppermill Dam and Longannet on the 25th (GD, JP); one at Elie Ness on 2nd June (DWO); and one at Tyninghame again on 26th June (HAF). At Glencaple, Dumfriesshire, there were at least 60 **Black-tailed Godwits** on 14th April (ELR), while counts of the flock on the Eden estuary, Fife, gave totals of 26 on 20th April (DWO) and 35 on the 28th (CT). Other records are of one at Skinflats, Stirlingshire, on 7th April (GD, JP), two at Caerlaverock, Dumfriesshire, on 22nd May (ELR), and 12 that remained for a few days from 20th May at Garynahine, Lewis (WAJC). In East Lothian there was a **Green Sandpiper** at Aberlady on 14th April (KSM), and two were seen at Tyninghame on the 27th (RM).

The first **Common Sandpipers** arrived about the usual date:

13 Apr—3 Thornhill, Dumfries (JHS), 1 L. Leven, Kinross (TB).
14 Apr—Sanquhar, Dumfries (AB, JL), 1 Gladhouse, Midlothian, and 2 Portmore Peebles (RWJS).
17 Apr—Sannig, Islay (CT).
18 Apr—Corsock, Kirkcudbright (AFA), Vale of Leven, Dunbarton (TDHM), Haddington (AM).
19 Apr—King's Cross, Arran (GM).

Single **Greenshanks** were noted at Caerlaverock, Dumfriesshire, on 16th April and 31st May; they are rarely seen on spring passage in the Solway (ELR). A **Curlew Sandpiper**, always a rare bird in spring, was seen by the wooden bridge at Aberlady on 7th May (CAP). Single **Ruffs** were seen at Skinflats on 7th April (GD, JP), Caerlaverock on the 16th (ELR), and Dornoch Point saltmarsh, Sutherland, on 25th and 29th (DM); and later there were two ruffs and two reeves at the Loch of Mey, Caithness, on 1st June (RM), and a single reeve at Gladhouse on the 2nd (RWJS).

An anxious pair of **Great Black-backed Gulls** was obviously defending territory and evidently nesting on Craigleith, off North Berwick, on 15th June but formal proof of breeding was not obtained (RWJS). A **Lesser Black-backed Gull** of the British race was at Inverness on 4th February (RHD). As there is a small wintering population of this species, especially on the Solway, it is difficult to know when the first spring migrants arrive, which they do earlier on the west coast than the east, but at Caerlaverock the first few were seen on 12th March (ELR), not an early date. Another substantial spring movement of **Common Gulls** (see *antea* 2: 3, 206, 357) was seen at the Bass Rock between 18th April, just a few days earlier than last year, and the 26th (JBN). An adult **Iceland Gull** was at Ayr on 17th February (GAR), and a 3rd winter bird at Oban on 30th March (AGG, TDHM). A 1st summer **Little Gull** was at Kilconquhar Loch on 21st May, and other East Fife records are of five 1st summer birds at Morton Lochs on 6th April (DWO), about 50 there on the 21st (six or eight in adult summer plumage and most of the rest in 1st summer plumage) (IVB-P, AHH, IMF), over 40 adults and immatures at the Eden estuary on 19th May (CT), and two 1st summer birds at Morton Lochs on 1st June (DWO). The **Black-headed Gull** colony at Hilda Marshes, Glasgow, increased rapidly from about 20 pairs in 1960 to 50 and 250 pairs in the following years, but in 1963 after reaching about 400 pairs the colony was deserted in the middle of May owing to the disturbance created in filling the marsh with rubble to make football pitches (WW). There do not seem to be many Scottish records of **Kittiwakes** resting on the shore in numbers; on 14th April right up the Solway at Browhouses, Dumfriesshire, 200 were resting on the sands half way across the firth, being constantly mobbed by immature Herring Gulls (RTS); while at Largo Bay, Fife, on 30th June there were 250, mostly adults, on the sandy beach (DWO). In the Forth the Inchkeith colony which had one nest in 1961 (*antea* 1: 478) increased to two in 1962, and there were 20 nests on 19th June this year (RWJS).

A **Black Tern** was at Morton Lochs, Fife, on 21st April (IVB-P, AHH, IMF), and there was a small influx at the beginning of June: eight on the Castle Loch and one on the Kirk Loch at Lochmaben, Dumfriesshire, on 2nd June (HMR, RTS), all seen leaving NE at 9.45 p.m. (DMe, JKRM), and one each on the Castle and Kirk Lochs on the 3rd (RTS); one at Peppermill Dam, Tulliallan, Fife, on the 4th (GD, JP); one feeding over Bonnykelly Reservoir, near New Pitsligo, Aberdeenshire, on the 8th (AAD); and one hawking insects over Loch Spiggie, Shetland, on the 13th (DAPC). Numbers of Black Terns are often recorded on spring passage in south and east England, but it is most unusual at that season for so many to reach Scotland, especially the northern counties.

Single **Common** or **Arctic Terns** inland were seen at the Black Esk Reservoir, Dumfriesshire, on 19th May; between Walkerburn and Innerleithen, Peeblesshire, on 2nd June (JB); at Threipmuir, Midlothian, on 11th June (CT); and fishing the River Lyne south of Romanno Bridge, Peeblesshire, on the 16th (TCS). Sixteen **Common Terns** flying rapidly east near Buchlyvie, Stirlingshire, on 2nd June may have been late migrants to the Forth terneries drifted west by the east winds which had been blowing for the past few days (MFMM). The first Common Terns of the year were three near Girvan, Ayrshire, on 15th April (WP), and five at Elie on the 18th (DWO). The earliest **Little Tern** was in the Sound of Gigha on 21st April (TDHM). Four early **Sandwich Terns** were at Portencross, Ayrshire, on 31st March (ME, RWF, GLAP); and ten at Elie on 14th April (DWO), not a particularly early date but a week before a number of other reports: five seen by another observer at Elie on the 20th (IMF); two lots of two over Longannet (JH), some at Kinghorn (GHB), and 60 at Tentsmuir (IMF), all in Fife on the 21st; and three at Dirleton, East Lothian, on the 22nd (KSM).

The body of a **Little Auk**, estimated to have died one or two weeks earlier, was found at Girdle Ness, Kincardineshire, on 25th April (RWM, AMT).

Three **Turtle Doves** were reported at the beginning of June from areas where they do not breed: on the Bass Rock on the 1st (JBN); near Currie, Midlothian, on the 11th (CPR); and near Moffat, Dumfriesshire, also on the 11th, for the whole day and leaving NW in the evening (RWA, ED).

Collared Doves continue to spread and multiply. On the mainland of Shetland there was one at Loch Spiggie on 23rd June (DWO), and at Fair Isle at least half a dozen different birds appeared during the spring (PED). Two in a stackyard at Dunnottar Castle near Stonehaven on 23rd June are the first for Kincardineshire (VMT), though whether this falls into North Kincardine (Dee Faunal Area) as shown on the maps in *The Birds of Scotland* (1953) and *The Vertebrate Fauna of Dee* (1903), or into South Kincardine (Tay Faunal Area) as claimed by *The Geographical Distribution* (1928) and *A Fauna of the Tay Basin* (1906), is far from clear. Harvie-Brown in this last work admits to extending the boundaries of Tay further north than was previously accepted (p. lxix), and we prefer the older interpretation (followed by *The Birds* *of Scotland*) which treats more than a remnant of the county as North Kincardine. On Islay doves with collars have been seen in various places for some time but never certainly identified; there were three at Aoradh on 5th April 1962 (JM); and five were there in 1962 and said to have bred in 1961; two moved to the Post Office on the Flats; and two tame birds were reported about Port Ellen (GW, MIW). In 1963 there were further reports of three birds behind the Post Office at Gruinart Flats on 1st January but these were not seen well, and local information suggested that doves had been brought into the area; on 14th April two birds with very dark primaries but no white under the tail were also unsatisfactory (CT). Finally a genuine Collared Dove was found in a weak condition at Killinallan in the Loch Gruinart area and died (RH, HK); the body was sent to GW who confirmed the identity and presence of white on the underside of the tail; it arrived in Edinburgh on 6th May and is now in the Royal Scottish Museum. Collared Doves on Islay are said to have interbred with "pigeons" in 1962 (HK). In Edinburgh Collared Doves were reported in Dick Place in 1961 and nearby in Mayfield Terrace in 1962 (*antea* 1: 486; 2: 260). This year in the same area two were seen in Queen's Crescent on 11th and 18th April and one or two on various dates from 2nd to 11th June (MJW); a pair nested in Dalrymple Crescent close to a hen run and fledged two young in mid May (SGAH); and they were also seen in Hope Terrace (per GW). In Solway one was seen at Barrbank, near Sanquhar, Dumfriesshire, on 26th April (JL), and two feeding by a hen house next day (AB).

The first **Cuckoo** was at Selkirk on 16th April (AJS); one near Dalry, Kirkcudbrightshire, on the 18th (ADW); and one at East Linton, East Lothian, on the 22nd (GWGB); reports have not been received from any other localities until it was noted at Sanquhar on the 27th (JL), Portmore, Peeblesshire (EMG, RWJS), and Lagganbridge, Inverness-shire, on the 28th (HAF), and Roslin, Midlothian, on the 29th (JB).

A **Short-eared Owl** was seen over the Royal Botanic Garden in the centre of Edinburgh on 28th March (JHS).

On 22nd June in Glen App, Ayrshire, a **Nightjar**, and possibly a second bird, was churring and display flighting (RMR).

Once again the first **Swifts** were seen in April, though there are only two reports:

27 Apr—1 Barr Loch, Renfrew (LAU).
28 Apr—2 Gladhouse (EMG, RWJS).
1 May—1 Colinton, Edinburgh (IMF).
2 May—1 Stockbridge, Edinburgh (JHS), 1 Haddington (AM), 2 Kilconquhar, Fife (DWO).
4 May—1 Aberlady (CT), Kirkcaldy, Fife (GHB), Killearn, Stirling (AJBL).

The first **Swallow** appeared on 11th April, but in general the early ones were about a week late:

11 Apr—1 north edge of Moorfoots, Midlothian (JB).
13 Apr—1 Dalbeattie, Kirkcudbright (AFA).
14 Apr—1 Sanquhar (JL), 3 Gorebridge, Midlothian (DD).
15 Apr—Kilconquhar, Fife (RIM).
16 Apr—Newbattle, Midlothian (DD).
17 Apr—2 Gullane, East Lothian (IMF), 1 Braids, Edinburgh (JAS), 1 mouth of R. Endrick (HFD), 2 Brodick, Arran (GM), Staffin, Skye (MJCM).
18 Apr—2 Corsock, Kirkcudbright (AFA), Vale of Leven, Dunbarton (TDHM), 2 Balfron, Stirling (AJBL), Selkirk (AJS), 2 Pityoulish, Aviemore, Inverness (HAF).
19 Apr—Cockburnspath, Berwick (AM), East Linton (GWGB), Haddington (AM), Isle of May (AM), 1 Lossit Bay, Islay (CT).
20 Apr—17 Barr Loch, Renfrew (RWF), Duddingston, Edinburgh (DRA), 30 Bridgend, Islay (CT).
21 Apr—1 Marybank, Ross (MKM-D).

House Martins arrive later and were up to time:

18 Apr—Isle of May (AM).
21 Apr—Kirkcaldy, Fife (GHB).
22 Apr—Drymen, Stirling (TDHM).
23 Apr—Eddleston, Peebles (NPD), Duddingston, Edinburgh (DRA), Kilconquhar (DWO).
25 Apr—Bush, near Edinburgh (NPD), 1 St Andrews (MHEC).

At Cramond very few were seen during May and the main return to the colony seemed to take place in the first few days of June, two being present on 30th May but many by 6th June (TCS).

One **Sand Martin** was reported on 8th April but no others until the 12th, and as in 1962 these first dates are very late and indicate the extent to which migration was held up by the weather:

8 Apr—1 Balloch, Dunbarton (RAJ).
12 Apr—1 Kilconquhar (PGB).
14 Apr—1 Thornhill, Dumfries (JHS), 1 Threipmuir, Midlothian (TB).
15 Apr—Selkirk (AJS).
17 Apr—Sanquhar (AB).
18 Apr—Vale of Leven, Dunbarton (TDHM).
19 Apr—Tyninghame (AM), St Andrews (MHEC).
20 Apr—Duddingston (DRA), Longannet, Fife (JH), 8 Barr Loch, Renfrew (RWF), 2 Bridgend, Islay (CT).

In Ayrshire a **Hooded Crow** was seen near Maybole on 2nd February (RMR). In East Lothian, where **Magpies** are very scarce, one was near Yester on 26th May (KSM).

Following the recent arrival of **Blue Tits** in Stornoway (*antea* 2: 91, 95, 261, 347) at least three pairs nested in holes in trees in the woods—the first record of breeding in the Outer Hebrides. At least two pairs of **Treecreepers** brought off broods in Stornoway Woods this year following the unsuccessful 1962 attempt (*antea* 2: 93, 95, 350) (WAJC, IM, WM).

A late **Fieldfare** was at Dunfermline, Fife, on 7th and 9th

May (GD, JP). A recently fledged **Redwing** was watched for some time on 2nd June in a birch copse by a river in north Ross-shire; this was at the same place where a nest with young was found in 1961 (*antea* 1: 454) (DM). On 13th January at Cramond the body of a Redwing was found below a ledge on which it had been roosting; it appeared to have starved to death. From its plumage it was taken to be an example of the Iceland form *coburni*, and this was later confirmed from the wing measurement of 124/126 mm (depending on how the measurement is taken). Though this race may well be quite common in winter this is in fact the first definite record for Midlothian (RM). There was a distinct lack of reports of early **Ring Ouzels**, which usually appear in the second half of March. After a particularly early bird reported on the Isle of May on 8th February (WWa per AM), and a cock at Thornhill, Dumfriesshire, on 23rd March (JHS), the next note was from Selkirk on 8th April (AJS).

There are a number of March records, some of them particularly early, of **Wheatears**, but no great numbers seem to have arrived until mid April and many active bird watchers did not see their first until well into the month:

10 Mar—1 on high ground near Stranraer, Wigtown (HF).
16 Mar—cock Doonfoot, Ayr (ATM).
18 Mar—Gullane Point (CAP).
22 Mar—1 near Stranraer, perhaps the same as on 10th (HF).
23 Mar—1 near Dumfries (JKRM per WA), several moving north between Loch Ken and Carsphairn, Kirkcudbright, and one pair displaying and going in and out of a hole (WUF), 2 singing near Little Loch Broom, Ross, and 1 Inverness (TW).
26 Mar—cock near Linlithgow (HGC).
29 Mar—3 Ayr (DS).
30 Mar—1 Aberlady (CT).
31 Mar—Sanquhar (JL).
5 Apr—pair Carloway, Lewis (WAJC).

On 16th April in a small glen near Tarland, Aberdeenshire, there were at least 40; this is a good example of the late arrival of this species as there had been none there on the 15th (KW). On 8th May a pair was present in the Royal Botanic Garden in the centre of Edinburgh (JHS).

Being late migrants **Whinchats** were up to time: one near Thornhill, Dumfriesshire, on 23rd April (ADW); two at Cranshaws, Berwickshire, on the 30th (AM); a cock at Laggan-bridge, Inverness-shire, the same day (HAF); and noted at Addiewell, Midlothian, on 1st May (HH).

Redstarts appeared a little late about 20th April in widely scattered districts: a cock singing at Crichton, Midlothian, on the 20th (KSM); two cocks at Gladhouse on the 21st (NPD), and noted on the Isle of May (AM) and at Inveraray, Argyll, the same day (TDHM); a cock near Thornhill, Dumfries, on the 22nd (JHS); and heard at Gartocharn, Dunbartonshire, on the 23rd (TW). A hen appeared in central Edinburgh on 6th May in the Royal Botanic Garden (JHS).

The first **Grasshopper Warblers** were reported from four localities on 27th April—several reeling at Barr Loch, Renfrewshire (LAU); one reeling at Aberlady (CAP); noted on the Isle of May (IVB-P); one reeling at Kilconquhar (RIM) where it may have been present earlier and where a second arrived on 7th May (DWO). Others were at Jardine Hall, Lockerbie, on 30th April (RTS), Newton Stewart on 5th May (JGY), and near Auchencairn on the 8th (AFA). At Gladhouse there were three different birds reeling in the area this year (DGA, JK).

Apart from one at Kilconquhar on 25th April (DWO), the first **Sedge Warblers** were noted on 5th May: at Sanquhar (AB), five at Barr Loch, Renfrewshire (RAJ), and one at St Abbs, Berwickshire (JADH). A pair feeding a fledgling on 30th June on the outskirts of Stornoway is evidently the first positive breeding record for Lewis, although the observer has noted the species at this site before and once at Uig carrying food on 10th July 1958 (WAJC).

A cock **Blackcap** visited a garden in Ainslie Place, near the West End of Edinburgh, on 6th and 9th February and daily until the 27th; it fed on a mixture of fat, crumbs and Swoop, and was very aggressive towards other birds (NN). Early summer arrivals were about the usual date: present at two places near High Valleyfield, Fife, on 25th April (JH), and a cock at Thornhill, Dumfriesshire, on the 27th (JHS). One was seen at Cockburnspath, Berwickshire, on 5th May (JADH), and a cock was at Blackford Pond, Edinburgh, on the 12th and 21st (HEMD).

Garden Warblers at two places near High Valleyfield on 29th April were distinctly early birds, especially as summer visitors usually tend to be slow in getting through to this central area. Later there were the usual 10 singing cocks in the area, numbers being back to normal after the drop in 1962 caused by disturbance from forestry road making (*antea* 2: 211) (JH). One was at Kilconquhar on 3rd May (DWO).

Whitethroats were in two localities at High Valleyfield on 28th April (JH); one at Dalbeattie, Kirkcudbrightshire, on 1st May (AFA); reached Stornoway on 3rd May (WAJC); and several noted at Coldingham, Berwickshire, on the 5th (JADH).

Single **Lesser Whitethroats** were on the Bass Rock with other late migrants on 26th May and 6th June (JBN), and an extremely skulking bird was singing at Scalloway, Shetland, on 27th June after a week of SE gales (DWO).

Willow Warblers were a week or ten days late, but then reported from a host of places in the middle of April:

16 Apr—heard St Andrews (MHEC).

18 Apr—1 Paisley, Renfrew (RAJ), Vale of Leven, Dunbarton (TDHM), 2 St Abbs (IMF).

19 Apr—Sanquhar (JL), Selkirk (AJS), 1 Gifford, East Lothian (HFD, TCS), Bush near Edinburgh (NPD), Addiewell, Midlothian (HH), 2 Bridgend, Islay (CT).

20 Apr—1 Dalbeattie (AFA), 1 Newbattle (DD), Duddingston (DRA), 1 Botanic Garden, Edinburgh (JHS), 1 Dalmeny, West Lothian (HFD, TCS), Longannet (JH).

21 Apr—4 East Linton (GWGB), Kirkcaldy (GHB), Kilconquhar (DWO).

22 Apr—Stornoway (WAJC), abundant Gladhouse area (DGA).

23 Apr—Jordanhill, Glasgow (HGC), Haddington (AM), numerous near Lagganbridge, Inverness (HAF).

A **Willow Warbler** or **Chiffchaff,** presumably the latter, was on the Isle of May on 16th March (WWa per AM), and a definite **Chiffchaff** on the 29th (AM); on the last day of the month one was at Gartocharn (DS); and another at Fair Isle, the first to be recorded there in March since the war (PED); in early April single birds were recorded at Stornoway on the 6th (WAJC), Polton, Midlothian, on the 7th (RWJS), High Valleyfield (JH) and Laurieston, Kirkcudbrightshire, on the 8th, and Auchencairn, Kirkcudbrightshire, on the 9th (AFA).

The only significant arrival date quoted for **Spotted Flycatcher** is 28th April at Kilconquhar (DWO). The first **Pied Flycatcher** was at Sanquhar on 26th April (AB); one was at Loch Ken next day (ADW); and a cock was at Kilconquhar on the 28th (DWO); a hen was seen at St Abbs on 5th May (JADH). This is a local species in Kirkcudbrightshire, but it has bred regularly for at least the past ten years in one locality in the south-west of the county (RS). On 28th April one was singing in a wood on the southern fringe of Flanders Moss between Arnprior and Kippen; there are few records from this area and none of breeding in Stirlingshire (MFMM). The Pied Flycatcher is rare in Ross-shire, where a cock was present near Contin in the east of the county from mid May to the first week of June (DMi).

Tree Pipits arrived at about the usual time: one was at Lockerbie on 19th April (RTS); four at Thornhill, Dumfriesshire, on the 21st (JHS); a number at Gartocharn on the 23rd (TW); and noted at High Valleyfield the same day (JH).

The **Pied Wagtail** is a scarce breeding bird in the Outer Hebrides, and although *The Birds of Scotland* says they breed regularly at Stornoway a pair there this year provided the observer with his first breeding record (WAJC). Two **Yellow Wagtails,** evidently both cock *M.f. flavissima,* were at Gladhouse on 5th May (DGA), and a pair was at West Barns, East Lothian, the same day (TB, RWJS). On the 11th a hen at Loch Leven, Kinross-shire, resembled the race *M.f. thunbergi* (RWJS). In Glasgow the breeding area at Hilda Marshes (*antea* 2: 212) has unfortunately been bulldozed to make football pitches, but a single Yellow Wagtail was seen flying over on 11th May (WW) and two were there, an ordinary hen and a Blue-headed *M.f. flava* cock, on the 22nd (BZ).

In addition to the small number of **Waxwings** already recorded (*antea* 2: 323, 381), one was in the Royal Botanic Garden in Edinburgh on 1st January feeding on the Himalayan tree *Malus sikkimensis,* probably the first record of this food being taken (GM), and one in Inverness on 7th April (MR).

A glorious cock **Brambling** in full plumage appeared on the Bass Rock with other migrants on 6th June (JBN).

Two **Corn Buntings** were noted well within Edinburgh at Blackford Glen on 1st June (HEMD). A cock **Red-headed Bunting** was seen near Collin, Dumfriesshire, on 11th May, but current thinking is to regard all examples of this popular cage bird as escapes unless there is strong contrary evidence (VECB-B). The **Reed Bunting** is sparsely distributed in the Outer Hebrides so that it is worth noting a brood of young at Stornoway on 30th June and two nests at Dalbeg, near Shawbost, on 9th June (WAJC). Two **Tree Sparrows** near Morton Lochs on 21st April are evidently the first for the Tentsmuir area for over 40 years (see *antea* 2: 159) (IVB-P, IMF, AHH).

Earlier observations—before 1st January 1963

A **Black-necked Grebe** was seen on 17th August 1962 in the Bay of Clachtoll, near Stoer, Sutherland; there are few published records for the county (GM).

Two winter **Greenshanks** were at Caerlaverock from 20th to 28th December 1962 (ELR).

To add to the list of **Black Terns** noted last autumn (*antea* 2: 259, 317, 383) is yet another, at Kilconquhar Loch, Fife, on 7th October 1962 (DWO).

On the Island of Bute a pair of **Nightjars** was discovered at Scalpsie on 2nd July 1962 with two eggs, one of which hatched out two days later (AWB).

The record of **Green Woodpeckers** nesting in Dumfriesshire in 1960 was the first published record of breeding in Solway (*antea* 1: 379, 2: 195), but this is a most misleading claim as the bird was well established long before that. It was seen at Eastriggs, Dumfriesshire, in 1952 and may even have been quite widespread in the county by then. During the S.O.C. enquiry it was found breeding in 1954 in Dumfriesshire at Bankhead near Lochmaben, Newtonairds, Dunscore, Springkell near Kirtlebridge, and Raehills near Johnstone; it was noted but not proved to be breeding at Woodcock Air near Hoddom, Jardine Hall near Lockerbie, Rammerscales near Lochmaben, Dalswinton, Stapleton near Annan, Ecclefechan, and The Broats near Kirkpatrick-Fleming, (JPh, RTS). In

Kirkcudbrightshire it was noted at Munches near Dalbeattie in 1954 (JPh, RTS), and in the south-west of the county one was seen at a hole in 1957 and presumably nested, and the species has been there ever since (RS); while not upsetting the first claimed breeding record this information now carries the first occurrence back to 1954 (see *antea* 2: 43, 261, 318, 346, 349).

The 1961 record claimed as the first for Selkirk (*antea* 2: 43, 346) is certainly not the first as the species bred in the county as early as 1951 (*The Birds of Scotland* Appendix II); it was reported at Bowhill near Selkirk in February that year and the identification confirmed on 20th April, and an adult with fledged young was seen in Yarrow on 16th July (AJS). Other records were collected for the S.O.C. enquiry in the early 1950's but these have not yet been published.

In North Argyll a Green Woodpecker was heard and reported seen on 31st May 1955 at Achnamara, and reported again on 16th August 1956; both these records are earlier than the first previously published for the Argyll Faunal Area and North Argyll (*antea* 1: 257). Single birds were seen near Tayvallich on 13th November 1960 (recorded as "near Lochgilphead" *antea* 1: 383) and two miles away on 3rd December 1960. On 15th April 1961 one was seen on the western outskirts of Lochgilphead, and this is the first record for South Argyll (IR).

Further evidence of the northward impetus of the Green Woodpecker is provided by the record of one seen on several occasions during a short holiday about mid November 1961 between Laurencekirk and Fettercairn, Kincardineshire; this is the first published record for South Kincardineshire (JMS).

A **Wryneck** was heard and seen in characteristic pose near the Loch Garten Osprey wardens' camp at Inchdrein on 26th May 1962 (KDGM); we have previously commented on the curious concentration of records of Wrynecks in this part of Scotland (*antea* 1: 494).

General observations on food, plumage and behaviour

At about 0430 hrs GMT on 20th May on the Isle of May 15 **Shags** were found standing or hopping about on the turf at the head of Pilgrim's Haven, where the high pressure pipe runs to the south foghorn. They were amusing themselves with communal games; one was doing a tightrope act along the pipe, balancing with its wings; one, finding a suitable bunch of dried grass, flew off with it to the nest; two more were vainly trying to lift a piece of wire that was too heavy; but the majority were making sudden sharp darts with their bills at something on the ground. At first I thought that they were feeding off some hatch of insects, but when I inspected the ground later I found that they had been snipping off the heads of sea pink buds, of which about a hundred lay on the turf. This form of game probably develops out of the communal collection of nesting material—that used by the Shag, as is well known, being of extraordinary variety. I visited the spot on the five ensuing mornings at about the same hour, but the Shags, like nymphs disturbed bathing, did not return. (MFMM).

On 10th May a **Buzzard** flying over a flock of about 50 Oystercatchers on the shore of Loch Fleet, Sutherland, suddenly circled and, swooping down, captured one of them. The Buzzard had not risen more than 50 feet when the Oystercatcher escaped, falling about 20 feet before regaining its balance and, apparently little the worse, rejoining its companions which were by this time mobbing the Buzzard. An Oystercatcher is probably on the large size for a Buzzard if it does not make a clean kill (JDO).

On 27th May in a small glen in Kirkcudbrightshire adjacent to a large plantation of young conifers where voles were abundant, a pair of **Kestrels** was breeding in a former Raven's nest and another pair in an old Buzzard's nest, within 200 yards of each other. Kestrels bred fairly plentifully in this area in 1963 (ADW).

A **Black Grouse** lek was discovered near the Lake of Menteith in a field sown with corn. Although the spot was only 200 yards from the farmhouse, and despite the character of the site having been changed completely by ploughing, the tradition of the lek was so strong that the birds continued to display on the bare earth. At the height of the season on 4th May there were ten cocks and four hens. On the 15th, when six cocks were at the lek, noises could be heard from three other places within a mile and small parties were located at two of them, suggesting a very local nature for these particular leks (TDHM).

At a pond on the Bush Estate, Midlothian, in 1962 a **Moorhen** had a nest with two eggs which soon disappeared; another seven were laid and also disappeared; the pair then built a second nest at the other end of the pond and laid and lost a further six eggs; in next to no time another six were laid, by which time the nest was safely covered with wire netting; the eggs duly hatched, but the bird laid 21 to achieve this (DD).

A hen **Cuckoo** of the scarce rufous colour phase was seen with a cock bird at Scalloway, Shetland, on 25th June (DWO).

On 23rd April the first **Swallow** returned to Lundin Links, Fife. A few weeks earlier the electric wires which ran along the side of the road had been removed, but the poles remained. The Swallow approached to within eighteen inches of one of the poles and hovered for a few seconds in an obvious attempt to perch where the wire had previously been. Unless the bird recognised the pole as a place where it ought to find wires to perch upon, it seems that it must have remembered the wires from the previous year (RSW).

A hen **Blackbird** at Robroyston Hospital, Glasgow, on 30th June had a broad white ring round the nape and throat, and from the front it resembled a Ring Ouzel (BZ). In Paisley a pure white Blackbird has been resident for at least five years and raised several broods all of which appeared normal, although a cock with several white tail feathers was seen half a mile away on 19th May (RAJ). Albinism is very common in this species.

In 1960 and 1962 a hen Blackbird, presumably the same one as it had almost no tail in each of these years, indulged in multiple nest building in Paisley. In 1960 it had a nest seven feet up in a lime tree; a few days later it built by itself a nest three feet off the ground in a hedge about 100 feet away; no eggs were laid in the first nest but three in the second; it did not incubate these, but within a few days began work on four new nests all at the same time; these were in four identical ventilating holes in the gable end of a brick outbuilding; no eggs were laid in them. The bird then disappeared until 1962, when it returned to work on a new set of four nests facing the old ones, the remains of which could still be seen in the building opposite; it abandoned these after a week of frenzied straw collecting and began a nest several feet above its old one in the lime tree, later abandoning this too and disappearing, much to the relief of the observer (RAJ).

A completely white fledgling **Starling** was seen with a brood of normal ones in Dumfries on 28th May, and an aberrant cock **Chaffinch** at Glencaple on 16th April had the entire plumage orange-buff, as on the breast of a normal bird, but bill and legs were normal (ELR).

Correction

The ten **Tree Sparrows** on 12th December 1962 (*antea* 2: 382) were seen at Symington, Ayrshire, not at Symington, Lanarkshire (GAR).

REVIEWS

A Sailor's Guide to Ocean Birds: Atlantic and Mediterranean. (Bosun Books No. 18). By Ted Stokes. Illustrated by Keith Shakleton. London, Adlard Coles, 1963. Pp. 64; 19 figures. 6/-.

A simple, attractively produced little elementary guide suitable for inexperienced people, especially children, with a passing interest in the seabirds seen during a long voyage. There are three parts: first a simple recognition table according to size, appearance and area; second, brief descriptions of all species expected, with illustrations of the commoner ones; and third a list of species by James Fisher. The accounts of species are much more sketchy than those in Peterson's *Field Guides* for both sides of the North Atlantic, or especially W. B. Alexander's *Birds of the Ocean,* first of all field guides and still the only one devoted to all seabirds, and which Mr Stokes seems to regard as an American production. Mr Shakleton's half-tone drawings of the more familiar species are pleasant to look upon but lack the diagnostic detail provided by Peterson. The recognition tables lack the detail provided in the rather clumsy arrangement of groups of descriptions of similar species given by Alexander, and seem much less helpful than the analagous juxtaposition of drawings of similar species practised by Peterson, while as usual in field guides insufficient allowance is made for the occurrence of variations in plumage with season and age. Mr Fisher follows the current fashion for combining species of seabirds and changing their names; I feel myself that he goes too far when he starts to combine species of albatrosses (the two Sooty Albatrosses nest alongside each other on Marion Island), or refers to the "Tristan Great Shearwater".

W. R. P. Bourne.

People of the Forest. By Hans Lidman. Translated from the Swedish. Edinburgh and London, Oliver & Boyd, 1963. Pp. 191; 143 photographs. 42/-.

This is a translation from the work of a well known Swedish naturalist and photographer. His object, achieved with considerable success, is to convey an impression of the life and atmosphere of a forest in northern Sweden, probably near the Finnish border, through the changing seasons. He combines photography with an episodic text. The latter comprises twenty-one vignettes, each of some three to four pages, describing fictional incidents in the lives of forest creatures;

many events are made to centre upon the activities of Enok, a trapper.

The photographs, occupying about two-thirds of the book, are excellent. Many are strikingly parallel to, and perhaps inspired by, the paintings of forest life executed by the great Swedish artist Bruno Liljefors (1860-1941). Sixty-two of the total show us 18 species of birds, over half of them familiar in Scotland. Mammals come a close second numerically, and the balance ranges over a smaller selection of reptiles, insects, flowers, and scenery of forest and lake. There are several unusual and spectacular action sequences; outstanding among these is the series of high-speed pictures of a day-old Goldeneye duckling frozen at various stages of its flight to the ground from the nesting hole, braking with tiny wings and webbed feet. We are shown dancing Cranes, their nest and young; a superb series of a Black-throated Diver; a sequence of a dragonfly emerging from its larval skin; Capercaillies strutting in display. Variety in techniques avoids monotony. Thus much use is made of more than life-size enlargement; a whole page devoted to an Eagle Owl's eyes and beak, or to the soft outlines of a white hare's features, convey well the extremes of ferocity and quietude.

Though the descriptive incidents carry the ring of accurate observation, the book sets out to be non-scientific, and sometimes this desirable simplicity is carried rather far. Thus in photographs of a young "gull", a "bat", and a "lizard" we are not told the species. Likewise with some, but not all, of the pictures and text about owls. Five plates show animal tracks, but we are left to guess their identity. Even accepting that only a cross-section of People of the Forest are being spotlighted, there are some unexpected omissions. Thus while wolverine and bear each have an episodic chapter to themselves there are photographs of neither. It is disappointing too, that though he mentions them in the text Mr Lidman has not turned his marked skill towards including elk and Black Woodpecker, both so photogenic and such magnificent features of the area portrayed.

The dominant theme however, so successfully conveyed, is that the continuous forest process of death from predators, from cold, from starvation, brought out in the text, is nevertheless throughout associated with beauty, whose impact is the task of the photographs. These can, as a collection to keep, be looked at with renewed pleasure many times over.

D. C. ANDERSON.

CORRESPONDENCE

SIR,

Sandwich and Roseate Terns on the Farne Islands

With reference to G. L. Sandeman's recent paper on "Roseate and Sandwich Tern Colonies in the Firth of Forth and neighbouring areas" (*antea* 2: 286-293), it is now possible to give the 1962 breeding figures for the Farne Islands. These are: Roseate Tern 27-32 pairs, Sandwich Tern 1,478 pairs.

At the same time some minor errors in the pre-1930 Farne Island records of Sandwich Terns should be pointed out. First, the figure of 300 pairs (page 287, line 34) relates to 1896, and not to 1886. Second, it is not correct to state that after 1897 there were no further breeding reports until 1925. There were certainly colonies, and apparently fairly large ones, in the period 1911-14, and evidence suggests that before and after this the birds nested annually. Information, especially for the earlier years, is not easy to obtain, but I think there is no doubt that the Farnes were not deserted by the Sandwich Terns for any long period during the years from 1850 to 1925. After an extensive search for additional evidence I have been able to find the following references:

1. G. Marples. "Sea Terns or Sea Swallows," 1934. Records Sandwich Terns numerous and breeding on six of the Farne Islands in 1856; only 200 nests in 1867; colony present in 1870; colonies on Wide-opens and Knoxes in 1885; enormous increase in 1892 with at least 2,400 nests reported; on Wide-opens and Knoxes in 1909 and 1911, spreading to Brownsman in 1912; on same islands in 1913 with 1,000 nests on Brownsman; great numbers in 1918 with 1,000-1,200 nests on Knoxes; back to Brownsman by 1921; temporary desertion in 1923. How reliable some of these counts may be one can only guess, and a reference to a raid in 1923 (p. 211) seems to be a year out, but the series bears out the idea that there was nearly always a colony on the islands.

2. T. R. Goddard's manuscript cards in my possession include extracts from the migration reports of J. A. Harvie-Brown and others which indicate that Sandwich Terns nested annually from 1880 to 1887, the reports giving arrival and departure dates and occasionally referring, as in 1887, to hundreds of terns about the nesting places.

3. G. Bolam, "Birds of Northumberland and the Eastern Borders," 1912, p. 607. The Sandwich Tern is described as "a common summer visitant, breeding annually at the Farne Islands," and the 1896 figure of 300 pairs is cited.

4. R. Fortune. The Birds of the Farne Islands. "The Naturalist" 1907: 234-238. Records nesting on Knoxes in 1907.

5. E. Miller. A list of birds observed on the Outer Farnes, season 1911-1914. "Vasculum" 1: 97-99. "Nests in numbers on the Knoxes and occasionally visits outer islands. One egg laid 1913 on the Brownsman but destroyed by gulls." E. Miller's original diaries in the Hancock Museum, Newcastle, support these statements, and suggest that the birds attempted to nest on the Brownsman as early as 1911. There were 200 ringed on the Farnes in 1913, and 258 in 1914 on the Knoxes alone. The diary refers to an article on "Disappearing British Birds" by A. P. Machline

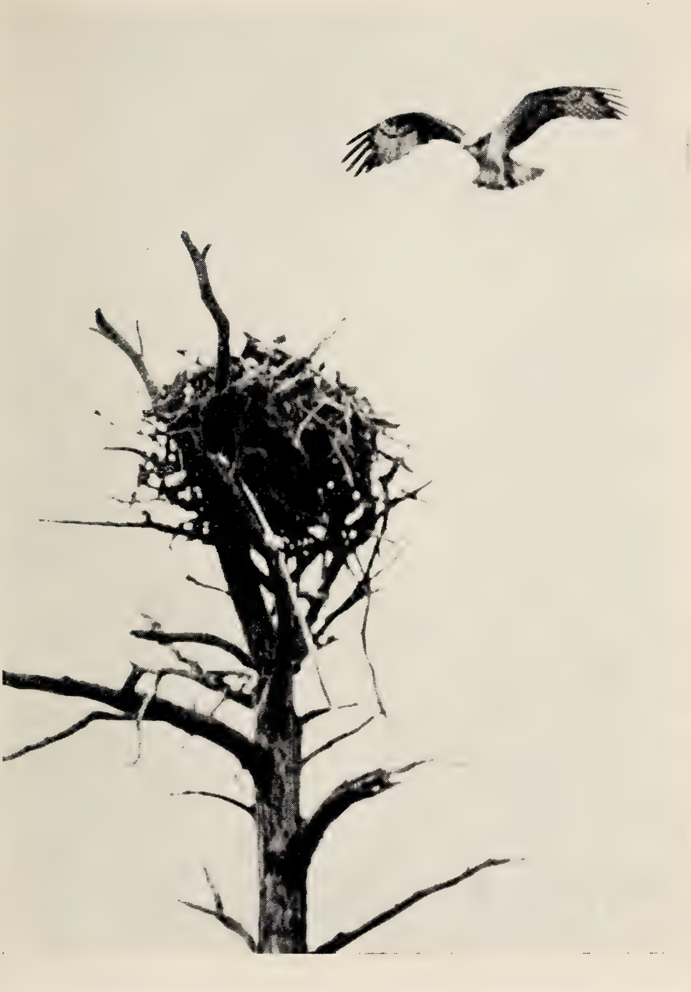

PLATE 22. OSPREY landing on its eyrie, Inshriach, Inverness-shire, June 1963 (see page 435).

Photograph by J. A. McCook.

("Countryside" 14th April 1906) which says, "The Sandwich Tern is practically confined to the Farne Islands where it is rigorously protected. The colony now numbers some hundreds and Seebohm states that on his visit in 1870 the nests averaged one to the square yard whilst on a subsequent visit to another part of the island he found them placed so close together as to render it impossible to avoid treading on the eggs."

6. G. Watt. "'The Farne Islands," 1951, pp. 122, 217. Recoveries of birds ringed in 1913 and 1914 are given, and reference is made to Sandwich Terns laying in 1922 but being much harried by visitors; the desertion at this time lasted for only a year or two.

7. M. G. S. Best. Letter in "British Birds" 15: 71. In June 1921 Sandwich Terns were breeding very numerously on the Brownsman.

8. The Minutes of a Conference on 18th January 1923 concerning the purchase of the islands refer to eggs laid in 1922 being taken as soon as they appeared, though the birds persisted for some weeks.

9. F. C. R. Jourdain reviewing "A History of the Birds of Norfolk" in 1931 ("British Birds" 24: 228) remarks that, "It is, however, a somewhat strange anomaly that the presence of the Sandwich Tern on the Norfolk coast is almost certainly due to the wholesale raiding of their homes on the Farnes for a short period when the protective system broke down, and completely unsettled the birds for a time."

10. A Report of the Secretary of the Farne Island Association shows that they were back in large numbers on the Brownsman in 1925, and I think they must have been there in 1924 from the wording of the report.

GRACE HICKLING.

REQUESTS FOR INFORMATION

Black Grouse. At the request of the Forestry Commission, the Nature Conservancy Unit of Grouse and Moorland Ecology is investigating the distribution and status of blackgame in Scotland, and the damage done by these birds to trees. A questionnaire is being circulated to foresters and other people who may help. If any member of the S.O.C. would like to assist with this enquiry will he or she please write to David Jenkins, Nature Conservancy Unit of Grouse and Moorland Ecology, Blackhall, Banchory, Kincardineshire.

Birds of Ayrshire. G. A. Richards, 29 Fullarton Road, Prestwick, Ayrshire, is compiling a check-list of Ayrshire birds, and would be grateful for any unpublished notes.

Rock Doves. While many pigeons frequenting the Scottish coast are obvious mongrels, especially in the south, there are some apparently true Rock Doves (showing two distinct black wing bars and a white rump) in most places. Counts of these and all coastal pigeons are wanted, and details can be had from Roy Hewson, 170 Mid Street, Keith, Banffshire.

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

SIXTEENTH ANNUAL CONFERENCE

HOTEL DUNBLANE, PERTHSHIRE

25th to 27th October 1963

PROGRAMME

Friday 25th October :

5 to 7.30 and 8.30 to 9.30 p.m.	Conference Office in the Hotel Dunblane opens for members and guests to register, collect name cards and Annual Dinner tickets.
6.15 p.m.	Meeting of Council.
8 to 9 p.m.	FILMS introduced by C. E. Palmar. "The Living Pattern" by The Nature Conservancy; "Highland Heronry" by C. E. Palmar; and "Marsh and Water Birds in Denmark" by F. Gordon Hollands.
9 p.m.	EXCURSION PLANS. Leaders will describe the places to be visited on Saturday and Sunday afternoons.
9.30 p.m. to midnight.	Lounges available for informal discussions and refreshments (late licence).

Saturday 26th October :

8.45 to 9.15 a.m.	Conference Office open for registrations.
9.20 a.m.	Official Opening of the Conference in the Ballroom. ADDRESS OF WELCOME by Archibald McLellan, Esq., Provost of Dunblane.
9.30 a.m.	LECTURE. "Birds of Prey and their Environment" by Dr Kai Curry-Lindahl (Zoological Department, Nordiska Museet & Skansen, Stockholm) followed by discussion.
11 a.m.	INTERVAL for coffee and biscuits.
11.30 a.m.	FILM. "Flamingoes of the World" filmed and introduced in person by Dr Roger Tory Peterson (National Audubon Society, New York, U.S.A.).
1 to 2 p.m.	INTERVAL for informal lunches.
2 to 5.30 p.m.	EXCURSIONS by private cars leaving the Conference Hotel car park. Details of the excursions will be posted in the Conference Office.
6.15 p.m.	27th ANNUAL GENERAL MEETING OF THE CLUB in the Ballroom. BUSINESS: (1) Apologies for absence. (2) Approval of Minutes of 26th Annual General Meeting of the Club held in Dunblane on 27th October 1962 (see "Scottish Birds" 2: 271-272). (3) Report of Council for Session 26. (4) Approval of Accounts for Session 26. (5) Appointment of Auditor. (6) Election of President of the Club. Professor M. F. M. Meiklejohn, having completed three years term of office, is due to retire. The Council recommend

the election of Dr I. D. Pennie.

(7) Election of Vice-President. The Council recommend the election of Dr W. J. Eggeling to succeed Dr Pennie.

(8) Confirmation of the election of M. K. Hamilton as Hon. Treasurer of the Club.

(9) Election of new members of Council. The Council recommend the following elections:
J. H. B. Munro and Dr D. H. Mills to replace A. G. S. Bryson and Lt. Col. J. P. Grant who are due to retire by rotation.
G. L. A. Patrick to replace G. H. Acklam who has gone abroad.
C. K. Mylne to replace Dr W. J. Eggeling, and A. J. Smith to replace A. T. Macmillan, who as Editor of the Journal is now an ex-officio member of Council.

(10) Consideration of the following proposed amendment to the Constitution under 4 (h) Financial Year: that the words "The Financial Year of the Club shall end on 31st August" shall be deleted and in their place shall be substituted "The Financial Year of the Club shall end on 30th June."

(11) Any other competent business.

7.30 for 8 p.m. ANNUAL DINNER in the Diningroom of the Hotel Dunblane (Dress informal).

Sunday 27th October:

9.30 a.m. LECTURE. "The Threat of Toxic Chemicals to Wildlife" by Stanley Cramp (Senior Editor of "British Birds" and Chairman of the B.T.O./R.S.P.B. Joint Committee on Toxic Chemicals), followed by discussion.

11 a.m. INTERVAL for coffee and biscuits.

11.30 a.m. FILM. "The Island Hills" (Ecology of the Scottish Islands) filmed and introduced by F. Gordon Hollands.

1 to 2 p.m. INTERVAL for informal lunches.

2 p.m. EXCURSIONS by private cars leaving the Conference Hotel car park.

INFORMATION

Please read this carefully.

(1) **Conference Post Card.** In order to simplify arrangements it is **essential** that members intending to be present should complete the enclosed printed post card and send it to the Club Secretary **not later than 21st October.** Owing to limited seating accommodation the Council regrets that members may invite only one guest each to the Annual Dinner.

(2) **Registration.** Everyone attending the Conference must register (10s each) at the Conference Office on arrival (for opening times, see Programme). Members wishing to attend only the Annual General Meeting do not require to pay the registration fee, which covers incidental expenses.

(3) **Annual Dinner.** Tickets for the Annual Dinner (price 16s 6d inclusive of gratuities) should be purchased when registering on arrival. Members and guests staying in the Conference Hotel will be charged for the Annual Dinner in their inclusive hotel bill, but **must** obtain a ticket from

the Conference Office as all tickets will be collected at the Annual Dinner. No payments should be made in advance to the office in Edinburgh.

(4) **Morning Coffee.** As the special Conference charge in the Hotel Dunblane now covers mid-morning coffees with other extras (see Hotel Accommodation below), the hotel staff have assumed responsibility for collecting the cost of morning coffees (1s 6d) from non-residents after serving. Members and guests who are not staying in the hotel are therefore asked for their co-operation so that there will be no undue delay in the Interval.

(5) **Luncheon.** Non-residents will be able to obtain luncheon in the Conference Hotel on Saturday and Sunday and are asked to inform the Hotel Reception Desk in good time if they wish to avail themselves of this arrangement.

(6) **Dinner on Friday Evening.** Dinner is served in the Conference Hotel from 6 to 10 p.m.

(7) **Hotel Reservations.** All reservations must be made direct. Owing to the shortage of single rooms, members are urged to make arrangements to share a room with a friend.

(8) **Swimming Pool.** The indoor swimming pool in the Conference Hotel will be available during the weekend at no extra charge.

(9) **Excursions.** Members are asked to provide private cars if possible and to arrange to fill their passenger seats; to avoid congestion in the car park the minimum number of cars will be used. Petrol expenses should be shared. Maps of the area covered are O.S. 1" maps, Old Edition Nos. 62, 63, 66, and 67, and New Edition Nos. 53, 54, 55, 60, and 61. Members wishing to go out on their own are particularly asked not to go in advance of led excursions to avoid disturbing the birds.

(10) **Exhibit of books, etc.** A selection of new ornithological books from the Club Book Shop will be displayed in the Conference Office for purchase or orders. R.S.P.B. and B.T.O. literature will also be on sale.

(11) **Exhibit of binoculars, telescopes etc.** Charles Frank Ltd. of Glasgow have agreed to mount a small exhibit of binoculars and telescopes suitable for bird-watchers. These will be on view in the Conference Office. Mr Arthur Frank will be present on Sunday morning to give advice.

Hotel Accommodation in Dunblane

DUNBLANE HOTEL HYDRO (now called HOTEL DUNBLANE) (Tel. 3161). Special Conference charge: £4, 16s 0d. This includes accommodation and all meals from Friday dinner until Sunday luncheon, the Annual Dinner, after-meal coffee, morning coffee and early morning tea. A 7½% gratuity charge will be added to all bills.

Residents staying part of the weekend will be charged as follows: room and breakfast 32s 6d, dinner 12s 6d, (or 16s 6d for the Annual Dinner, paid to the Conference Office), luncheon 7s 6d, afternoon tea 3s 6d, after-meal coffee 1s, early morning tea 1s, morning coffee and biscuits 1s 6d.

STIRLING ARMS HOTEL (Tel. 2156). Bed and breakfast from 25s.

*THE NEUK PRIVATE HOTEL, Doune Road (Tel. 2150). Bed and breakfast 18s 6d to 19s 6d.

*SCHIEHALLION HOTEL, Doune Road (Tel. 3141). Bed and breakfast 18s 6d to 21s.

BLAIRALAN, Dargie Terrace (Tel. 3196). Bed and breakfast 17s 6d to 18s 6d.

¶ARDLEIGHTON HOTEL (Tel. 2273). Bed and breakfast 15s to 17s 6d.

*These hotels are some distance from the Conference Hotel.
¶Situated near the Conference Hotel gates.

Hotel Accommodation in Bridge of Allan

ALLAN WATER HOTEL (Tel. Bridge of Allan 2293). Bed and breakfast 35s to 47s 6d.

ROYAL HOTEL (Tel. Bridge of Allan 2284). Bed and breakfast 33s to 36s.

Members with cars who have difficulty in obtaining single rooms in Dunblane should find the above two hotels in Bridge of Allan have ample single accommodation. The distance from Dunblane is about 3 miles.

The terms for hotels other than the Conference Hotel are quoted as a guide only and prices should be confirmed.

SUBSCRIPTIONS, DEEDS OF COVENANT AND BANKERS' ORDERS

Subscriptions for the new Session are now due and should be sent with the enclosed form to the Club Secretary or paid to Branch Secretaries. The winter number of "Scottish Birds" will only be issued to paid-up subscribers.

Members are once more reminded that the Club is able to reclaim Income Tax on all subscriptions paid under Deed of Covenant, which greatly benefits Club funds. The Council invites members who pay Income Tax at the full rate to undertake a seven-year Deed of Covenant by using the form enclosed. Completed forms should be sent to the Secretary, who will forward a Certificate of Deduction of Tax for signature each year.

A Bankers' Order is also enclosed for the use of members who find this a more convenient way of paying the annual subscription; this should be returned to the Secretary and not to the Bank.

CLUB BOOK SHOP

The Club has now received recognition from the Publishers Association. This enables us to obtain new ornithological books from all publishers at full trade discount. Books are of course sold at the retail price and the profits are applied to the General Funds of the Club. A stock of new books comprising over one hundred titles is now available for sale in the Bird Book Shop which has been opened at the Scottish Centre, and a selection of these books will be on sale at the Annual Conference.

It is hoped that by establishing the new bookshop we may be able to give a useful service to members both directly, by stocking a wide selection of books, and indirectly, by the increase in our revenue. Members are therefore invited to support this new venture by ordering their books through the Club. Purchases may be made at the Scottish Centre during office hours (weekdays 9 a.m. to 1 p.m. and 2 to 5 p.m.). Books ordered by post will be sent carriage free, and we will endeavour to obtain any book which is not in stock. An Order Form giving a selection of the stock is enclosed with this copy of the Journal.

NEW LENDING LIBRARY

The reconditioning of a new room for the Lending Library (see "Scottish Birds" 2: 396) is now complete, and books and journals are available on loan. The Lending Section is still not very large although all duplicate volumes we receive are placed there. We will be very glad to receive gifts of any books which members do not require with the provision that if these are already in stock we may dispose of them for the purpose of buying other books to fill gaps in the collection.

NOTICE TO CONTRIBUTORS

All contributions should be sent to Andrew T. Macmillan, 66 Spylaw Bank Road, Edinburgh 13. Attention to the following points greatly simplifies production of the journal and is much appreciated.

1. Papers should if possible be typed with double spacing. All contributions should be on one side of the paper only.

2. Topical material for Current Notes should reach the Editors **before the end of March, June, September and December,** at which time they begin to compile this section. All other notes should be sent promptly but important items can be fitted in until a month or so after these dates.

3. Proofs will normally be sent to authors of papers, but not of shorter items. Such proofs should be returned without delay. If alterations are made at this stage it may be necessary to ask the author to bear the cost.

4. Authors of full-length papers who want copies for their own use MUST ASK FOR THESE when returning the proofs. If requested we will supply 25 free copies of the issue in which the paper is published. Reprints can be obtained but a charge will be made for these.

5. Particular care should be taken to avoid mistakes in lists of references and to lay them out in the following way, italics being indicated where appropriate by underlining.

DICK, G. & POTTER, J. 1960. Goshawk in East Stirling. *Scot. Birds* 1:329.
EGGELING, W. J. 1960. *The Isle of May.* Edinburgh and London.

6. English names should follow *The Handbook of British Birds* with the alterations detailed in *British Birds* in January 1953 (46:2-3) and January 1956 (49:5). Initial capitals are used for names of species (*e.g.* Blue Tit, Long-tailed Tit) but not for group names (*e.g.* diving ducks, tits). Scientific names should be used sparingly (see editorial *Scottish Birds* 2:1-3) and follow the 1952 B.O.U. *Check-List of the Birds of Great Britain and Ireland* with the changes recommended in 1956 by the Taxonomic Sub-Committee (*Ibis* 98:158-68), and the 1957 decisions of the International Commission on Zoological Nomenclature (*Ibis* 99:369). When used with the English names they should follow them, underlined to indicate italics, and with no surrounding brackets.

7. Dates should normally be in the form "1st January 1962", with no commas round the year. Old fashioned conventions should be avoided—*e.g.* use Arabic numerals rather than Roman, and avoid unnecessary full stops after abbreviations such as "Dr" and "St".

8. Tables must be designed to fit into the page, preferably not sideways, and be self-explanatory.

9. Headings and sub-headings should not be underlined as this may lead the printer to use the wrong type.

10. Illustrations of any kind are welcomed. Drawings and figures should be up to twice the size they will finally appear, and on separate sheets from the text. They should be in Indian ink on good quality paper, with neat lettering by a skilled draughtsman. Photographs should either have a Scottish interest or illustrate contributions. They should be sharp and clear, with good contrast, and preferably large glossy prints.

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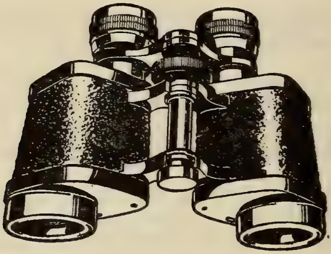

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The Society operates a ringing station at Beddington and, jointly with the Kent and Sussex Societies, Dungeness Bird Observatory.

The London Bird Report, compiled by the Ornithological Section and published annually, includes papers, facts and figures of special interest to bird watchers in London.

Further details can be had from the General Secretary :

Mrs L. M. P. Small,
13 Woodfield Crescent,
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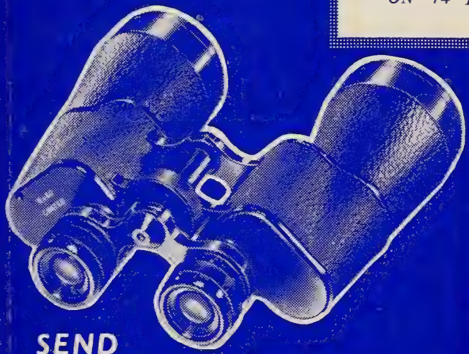

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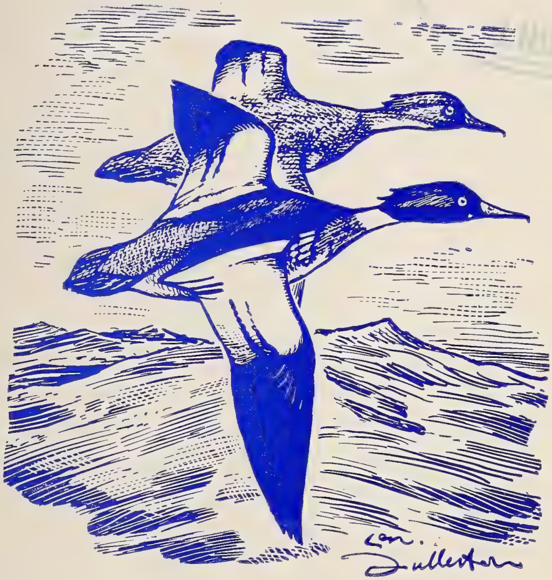

The Journal of The Scottish Ornithologists' Club

Vol. 2 No. 8 *Winter 1963*

FIVE SHILLINGS

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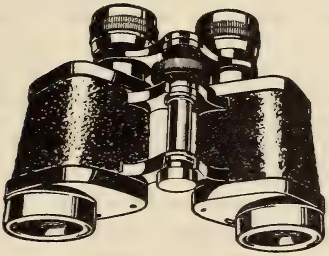

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THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

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Editorial

Dr David A. Bannerman. On 29th October 1963 the twelfth volume of *The Birds of the British Isles* was published; this magnificent work is now complete.

To mark the occasion the publishers, Oliver & Boyd, gave a dinner for Dr Bannerman—an evening which no one who was there will forget, as sumptuous and beautifully done as this great set of books. Many of those who had been linked with the production in one way or another were there, including members of that international band of ornithologists whose contributions have been so successfully incorporated in the chapters on their chosen species. Their names, and those of others who wrote expressing their sorrow at not being able to come, read like an ornithological *Who's Who.*

Any other man would be content: yet on the very day *The Birds of the British Isles* was published the first volume of *Birds of the Atlantic Islands* appeared. Dr Bannerman, Honorary President of the Scottish Ornithologists' Club, has our profound admiration, congratulations and best wishes for many future volumes.

Analysis of Osprey's egg. When the Loch Garten Ospreys lost their nest in a gale last summer it was hoped that a second pair at Inchriach might be successful. However, these unfortunate birds broke one of their eggs when the sitting bird was frightened suddenly off the eyrie by the irresponsible behaviour of bird watchers who succeeded in avoiding the R.S.P.B. watchers and approaching by a devious route much too close to the nest. The remaining egg never hatched, although the parent birds incubated it for a fortnight beyond the normal period. As previously reported (*antea* 2: 435), the egg was sent for analysis. It was infertile and contained no embryo: but it did contain residues of chlorinated hydrocarbons—highly toxic man-made substances used in pesticides. It is a grim comment on the incautious use that is made of these persistent poisons that in the present state of knowledge it is not possible to say whether the concentrations found were sufficient to cause infertility or not.

One can only guess how these chlorinated hydrocarbons got into the Osprey and its egg, but presumably the bird derived them from its diet of fish; which got them from eating plants or insects; which were either directly treated or accumulated the poison from the slow drainage off the surrounding countryside. Evidence is mounting that we are gradually poisoning the whole environment. This is reflected in the fact that more and more often it is proving impossible to say for certain which of several possible sources is responsible in cases of damage to animal life.

Conference resolution. The S.O.C. Conference at Dunblane at the end of October was as worthwhile as ever, enlivened by the presence of various famous ornithologists from northern Europe and America as well as the usual contingents of old friends from England and Ireland.

For many people the talking point of the weekend was Stanley Cramp's brilliant and sobering summary of "The threat of toxic chemicals to wildlife." With a fine grasp of his material, and never overstating his case nor allowing emotion to colour his presentation of the facts, he led us stage by stage through the events and growing alarm of recent years. A thought-provoking point was, as indicated above, that whereas in recent years when birds died from the effects of chlorinated hydrocarbons and other agricultural poisons it was usually possible to guess how they had acquired them, yet today it is frequently impossible—so widespread and varied are the possible sources. It is feared that the land is gradually soaking up these persistent and highly dangerous substances everywhere, even in the towns, where suburban amateur gardeners are unwittingly using inadequately labelled preparations containing them. In the United States of America the administration has now accepted the need for stringent control on the use of these chemicals and has adopted the aim of working towards an eventual complete ban on their use when effective substitutes can be found.

It was agreed that on behalf of the meeting Professor M. F. M. Meiklejohn and Dr Ian D. Pennie, Chairman and Vice-Chairman respectively of the Club, should send the following urgent message to the Secretary of State for Scotland:

> "A representative meeting, assembled in Dunblane, of over 200 members of the Scottish Ornithologists' Club strongly presses the Government, as a matter of urgency, to adopt a policy which will ultimately lead to the complete withdrawal of all chlorinated hydrocarbon pesticides, and to the immediate restriction of their use in agriculture, forestry, horticulture and private gardening."

A.B.M.A.C. Not only natural history interests are thinking about chlorinated hydrocarbons, though naturally the manufacturers of these chemicals tend to look at the facts from a different angle. Recent publicity has done something to draw attention to the widespread public concern about the problems and dangers. The Association of British Manufacturers of Agricultural Chemicals, representing nearly all the British producers, has recently appointed a full-time information officer to deal with enquiries. This body is concerned, among other things, with the safety and efficiency of the industry's products.

At a recent meeting of representatives of the Nature Conservancy, B.T.O., Council for Nature, Game Research Association, R.S.P.B. and A.B.M.A.C. it was agreed to set up two joint working committees. The first will meet regularly to study problems of wild life and agricultural chemicals and recommend practical measures to solve these; the second will deal with communication and education in the safe use of chemicals. This certainly seems a step in the right direction.

Egg collector fined. Unst is an island which receives more than its share of egg collectors from the south. In June Derrick Glover, a Derby man, was intercepted by police and found to be in possession of nearly 100 eggs, including no fewer than 32 of the Whimbrel; he was fined £30 in Lerwick Sheriff Court and the eggs forfeited. They will be given to the new Shetland museum. Glover was suspected of being a collector of Whimbrels' eggs when he was in Unst, and a report to the police enabled them to stop him in Lerwick.

Current literature. The interest for Scottish readers of the following important papers published in recent months will be apparent from their titles:

Migration in the Outer Hebrides studied by radar. By the late S. L. B. Lee (edited by D. Lack). *Ibis* 105: 493-515.

The status of the Peregrine in Great Britain. By D. A. Ratcliffe. *Bird Study* 10: 56-90.

The status of the Kittiwake in the British Isles. By J. C. Coulson. *Bird Study* 10: 147-179.

OBSERVATIONS ON THE FULMAR AT ST KILDA

W. E. WATERS

Introduction

The oldest and largest colony of the Fulmar in the British Isles is on St Kilda in the Outer Hebrides. The history of this colony has been well documented (see Fisher 1952). During my residence on Hirta between May 1961 and September 1962 I made observations on the Fulmar's annual cycle. The status of the Fulmar at St Kilda as given in the literature is reviewed and recent observations made during the years 1957 to 1960 are recorded. My own observations during the winter of 1961-

62 are given in detail. The Fulmar's autumn absence from St Kilda is now longer than past records indicate and is at variance with the usual behaviour of a large Fulmar colony (Fisher 1952). The change in habits is discussed but no conclusion is reached as to the reason for it.

This paper also gives counts of Fulmars on a small stretch of cliff on Dun which show a striking reduction in numbers in early May 1962. Observations are given on the interesting "inland" colony in Glen Mor.

THE AUTUMN ABSENCE OF THE FULMAR

All published observations of the Fulmar on St Kilda, from the visit of Martin Martin in 1697 to the evacuation of the islanders in 1930, agree that the Fulmar left the cliffs at the end of August and during September and that only odd birds remained into October. The return to the breeding cliffs took place in October or November. Evidence for these dates comes from numerous sources and the principal references are summarised in Table 1. Fulmars were then present about the cliffs for the whole of the winter except perhaps during high winds. For nearly thirty years after the evacuation, St Kilda, remote and uninhabited, was visited by naturalists only occasionally and then only during the summer months. When men again lived on the island in 1957, and over-wintered, a change was noticed in the Fulmar's departure dates. This was recorded by Williamson and Boyd (1960) who found the Fulmar common throughout September and recorded that the birds did not leave until a gale on 1st November 1957. They returned in large numbers on 20th November and then remained on the cliffs except for brief spells in stormy weather.

Dr David Boddington (pers. comm.) made detailed Fulmar observations during the winter of 1958-59. He found that Fulmars remained on the cliffs in large numbers throughout September, October and November and that they were present at the Gap on 5th December. Fulmars were then absent from 6th until 30th December when one solitary bird was seen far out to sea towards Boreray. On 31st December Dr Boddington found Fulmars present over the cliffs and some were landing in the evening. During January and the first two weeks of February 1959, they were noted on only two dates and none was seen on the cliffs. Fulmars were present again on 15th February. 15th April was the last date during the winter of 1958-59 on which no Fulmars were seen on the cliffs.

Dr J. B. Gallacher (pers. comm.) found that considerable numbers of Fulmars remained throughout October 1960 although the numbers decreased on stormy days. Only small numbers were seen during the first week in November and

TABLE 1

The autumn absence of the Fulmar from St Kilda as given by the more important authorities before the evacuation in 1930. Dates, except for Mackenzie and Murray, refer to the year in which the records were published, usually a year after the author visited St Kilda

Year	Authority	Nature of evidence	Arrival and departure dates
1698	Martin	From St Kildans	"comes in November . . . is the only sea-fowl that stays . . . all the year round, except the month of September and part of October." These dates are before the calendar correction of 1752; eleven days should be added.
1829-1843	Mackenzie	Own observations	"Almost resident ... Only leave about the middle of August and return early in October*. . . They are only away about five or six weeks."
1878	Sands	Partly own observations	"The Fulmars (all but a few invalids) leave St Kilda about the end of August, and return about the 10th of November."
1886-1887	Murray	Own observations	"Fulmars leaving the island" on 26th August. "Fulmars now begin to return to the island" on 12th October.
1887	Connell	Mainly secondhand information	"found on the island all the year round, with the exception of the period between the end of August and the middle of November."
1900	Heathcote	Secondhand information	"September and October are the only months when they are not to be seen on the rocks of their native home."
1903	Wiglesworth	Secondhand information.	None seen "from about the end of August" until "they begin to return about the beginning of October . . . remain all the winter."
1912	Clarke	Own observations to 8th Oct 1910 and 12th Oct 1911	Fulmars were "far less numerous on the 25th (Sept), and all had gone . . . by the end of the month . . . They return after a month's absence, and remain all the winter."

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*Fisher (1952) thinks this is an error for November. However, Murray and Wiglesworth also record a return in early October.

then none at all until 18th November when the cliffs were "absolutely covered " with Fulmars. They had disappeared next day and none was seen until another large return to the cliffs of the Gap, Conachair, Ruaival and Dun on 2nd December; again all had left by the following day. No more Fulmars were seen prior to Dr Gallacher's departure on 11th December 1960.

My observations during the winter of 1961-62 have been briefly mentioned (Waters 1962) but are given here in more detail. Some Fulmars started leaving the vicinity of the island during August 1961 and more than half had gone by the middle of September. High winds usually reduced numbers on the cliffs but increased the number flying over Village Bay. Not all fluctuations, however, could be related to the weather. Several hundred Fulmars remained on the Village Bay side of Dun throughout September but decreased during early October. They remained longest on the Dun side of Caolas an Duin but had disappeared from here by 18th October in gradually deteriorating weather. On Hirta Fulmar numbers fluctuated considerably during October. On 8th October, with a force 5 south-easterly wind blowing, the cliffs of Conachair and those below the Gap were tenanted by nearly as many Fulmars as at any other time of the year. On most October days, however, less than 10% of their maximum numbers were to be seen, although Fulmars never completely disappeared from the main cliffs before my departure on 20th October.

On my return to Hirta on 1st December 1961 I gathered that Fulmars had been seen only occasionally and in small numbers during November. Despite scanning the horizon with binoculars each day I saw no Fulmars at all during December and none in January until the 31st, when about three thousand were seen from the Gap, out towards Boreray, all moving north-west but none within three-quarters of a mile of Hirta. A few days before this, on 26th January, Fulmars had been reported as "fairly numerous" on a crossing from the Sound of Harris to near St Kilda. It was not possible to relate the complete absence of the Fulmar from the seas immediately around St Kilda for nearly two months to weather conditions throughout this period. The winter of 1961-62 was very stormy but just before Christmas there was a spell of eleven days of fine anticyclonic weather with light winds. In this sunny weather the towering cliffs of the islands looked strangely deserted without a single Fulmar in sight.

During the first two weeks of February no Fulmars were seen except for about 100 on 8th and 10 on 14th, far out over the sea. On 18th February a massive return occurred. There were in the order of twenty thousand Fulmars flying around the island that day and they were seen ashore for the first time in 1962, a total of about a hundred being noted on the cliffs of Dun, Ruaival, Cambir and Conachair. More were ashore on the following days, but D. W. Wilson reported that on 23rd February the Fulmars left as suddenly as they had come, although the weather conditions were improving. None was seen for at least twelve days (D. W. Wilson, pers. comm.), but when I returned to Hirta on 19th March Fulmars were present in full or nearly full numbers. Their numbers decreased with high winds and snow on 29th March and none was seen on Ruaival or Dun on 31st when the islands were covered with snow down to sea-level. None was seen in Glen Bay or on the Cambir on 1st April. Their return to Ruaival and Dun started on the 4th and gradually built up until 7th April when they were at full strength and thereafter, except for the May exit, they remained ashore in large numbers for the summer. In 1962 Fulmars again started leaving the island in August, and less than a quarter remained when I left on 5th September. More observations are desirable as the past five years have shown some considerable variations but certainly some Fulmars are remaining on the island later in the autumn than formerly, and the return to the cliffs may not now occur until February.

MAY EXIT

The May exit was probably known to the St Kildans, as Connell (1887) recorded that the Fulmar was "to be found on the island all the year round, with the exception of the period between the end of August and the middle of November, and for a few days in spring." This is the only reference to this spring departure that I can trace for St Kilda.

In the spring of 1962 the number of Fulmars sitting on an easily identifiable section of low cliff on Dun (near Glasgeir) was counted up to five times a day between 11th April and 15th May. On any one day numbers usually remained fairly constant though they were often rather lower in the early morning (before 0800 hrs) and in the late evening (after 1900 hrs). Figure 1 shows the number of individual Fulmars counted each day between 0800 and 0900 hrs. It shows a marked reduction in numbers between 15th and 18th April. Venables and Venables (1955) have reported similar fluctuations in all months between November and April in Shetland. This reduction on 16th and 17th April rather surprisingly coincided with fairly calm weather. The lowest numbers on St Kilda occurred, however, between 1st and 10th May, after which the colony continued to recover until 15th May. This May exit was not related to the force or direction of the wind nor to temperature fluctuations.

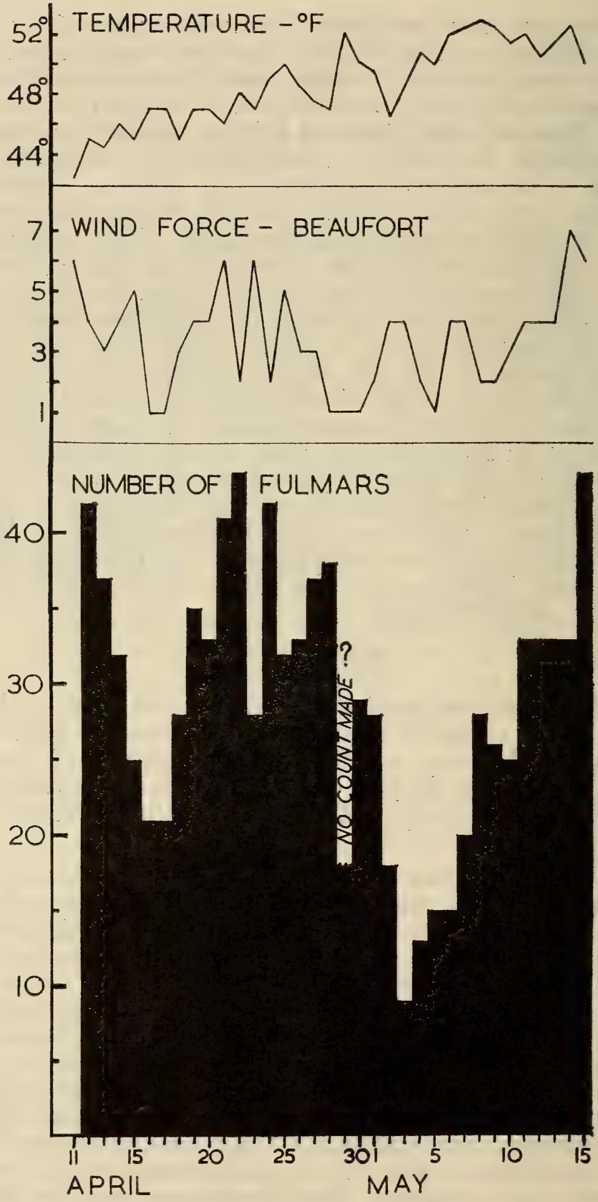

Figure 1. The May exit of the Fulmar, St Kilda, 1962. The number of Fulmars on a stretch of low cliff on Dun each day between 0800 and 0900 hrs GMT from 11th April to 15th May, compared with the wind force (Beaufort Scale) and screen temperature (°F) at 0900 hrs GMT in Village Glen.

Similar May exits have been recorded immediately before egg-laying in Shetland by the Venables (1955) and on Eynhallow in Orkney (Dunnet *et al* 1963). The St Kilda exodus was a week earlier than that observed on Eynhallow in 1962 when the lowest counts (which included Fulmars flying immediately off-shore) were obtained from 9th to 16th May. The number of eggs laid in the study area on Dun (which faces north-east) was not determined. My highest count of sitting Fulmars was 52 at 1300 hrs on 21st April. The minimum was eight at 1700 hrs on 3rd May and therefore represents just over 15% of the maximum during the period covered. As the number of Fulmars at the breeding cliffs may not reach its maximum even in late May these St Kilda observations certainly show a more marked reduction in numbers than the May dip given by Fisher (1952, p. 343), and are similar to the data of the Venables (1955) and Dunnet *et al* (1963).

THE GLEN MOR COLONY

At St Kilda the Fulmar is widely distributed around the coastal cliffs but is not found inland as it is on North Rona and some other islands. The only exception to this is a small colony on the Mullach Bi ridge overlooking Glen Mor where a score of pairs were first recorded in 1956. The first evidence of breeding at this "inland" cliff was obtained by Dr D. G. Boddington (pers. comm.) who found at least three young and one egg in a dozen or so occupied sites on 5th July 1959. I found one young Fulmar there on 23rd August 1961. The greatest number seen at this site in 1962 was 42 sitting birds on 28th April and a further ten flying close by. No eggs or young were seen in 1962, although Fulmars were not flushed from occupied sites, and these cliffs were deserted by 12th August.

DISCUSSION

Observations on the status of the Fulmar at St Kilda during the autumns and winters since 1957 are clearly at variance with the remarkably consistent accounts in the older literature. Although some birds leave the vicinity of St Kilda during August many now appear to remain into October and November. Fulmars then appear to be away for much of the winter; at least this was so in 1958-59 and 1961-62, the winters for which the most detailed records are available. Occasional flocks of Fulmars are seen at sea in all winter months, and landings in comparatively small numbers have been recorded in December in most recent years (but not in 1961). Doubtless many landings pass unobserved owing to the many miles of coastline and to all observers being resident in the Village area away from most of the island cliffs, although Fulmars would be readily visible on the sheltered side of Dun. However, most excursions were made in the better weather conditions, on days when winter landings would be more likely to occur.

The reason for the longer autumn exit (now really a winter absence) is not readily apparent. It is at variance with the general rule that the length of exit is related to colony size, the largest colonies having the shortest period of absence. Davis (1961) has shown that on Fair Isle the autumn exit has been shortened and is now "virtually confined to a diminution of numbers in the second half of September"; that is, the island is not completely deserted for any period. The Fulmars on Fair Isle are increasing and Davis thinks this shortened exit may be related to competition for nest sites. Although the absence is longer at St Kilda there is certainly no evidence for any decrease in the Fulmar population. Fisher (1952) has shown that their numbers were stable up to 1939, since when there has been an increase. This increase was perhaps related to the absence of human predation and it seems likely that the increase has now slowed down or even that the population is steady at the new higher level. Anderson (1957, 1962) by careful counting estimated 19,415 occupied sites on Hirta in 1956 and 19,716 five years later. It may be that the small inland colony in Glen Mor is related to the increase in the St Kilda Fulmar population although there would appear to be no shortage of nesting sites on the sea cliffs. It may also be related to the absence of human predation.

It is interesting that the Guillemot also has apparently returned later at St Kilda in recent years. Martin Martin (1698) says the lavy (Guillemot) "comes with a south-west wind, if fair, the twentieth of February" (this is 3rd March after the calendar correction of 1752). The Rev. Neil Mackenzie, minister at St Kilda between 1829 and 1843, another reliable chronicler, records that the Guillemot "comes in February" (Mackenzie 1911). In 1887 Guillemots were being caught for food on 19th March and were said to have arrived about 8th March (Murray 1887). In contrast all recent records are much later. The earliest is of a party of five flying east below the Gap which I saw from a boat on 23rd March 1962. I saw none on the cliffs until 8th April (1962) when seventy were above the Tunnel in Glen Bay and these were wary. There appear to be no records of earlier landings in recent years.

Having experienced the extreme storminess of a St Kildan winter one was tempted to try to relate the later arrivals of Fulmar and Guillemot to wind strength. However storms do not appear to have been responsible for the long Fulmar absence in 1961-62; nor do general meteorological data suggest the present climate to be windier than that of last century, when most of the Fulmar observations in Table 1 were made.

No Fulmar landings were observed from 1st December 1961 until 18th February 1962. Each day during this period of 79 days I observed at least some sections of cliff where Fulmars breed. Small-scale landings might have occurred but are thought unlikely as on most days no Fulmars were seen even out to sea. This is the longest recorded absence of Fulmars from the St Kilda cliffs in the history of the archipelago. It may well have been even longer as continuous observations were not made in November 1961. Winds of gale force (Beaufort Scale, force 8) occurred on 25 of these 79 days. The longest gale-free period was from 16th December to 6th January (22 days) during which time winds reached force 6 on only three days. However not a single Fulmar was seen, either about the cliffs or out to sea, during these 22 days. If the strong winds, accentuated by the height of the cliffs, are producing the later return to the breeding cliffs they have also driven the Fulmar well away from the islands.

It is only since 1957 that detailed meteorological observations are available for St Klida. The islands have long been known for their stormy weather but comparisons between present weather conditions and those of last century are difficult. I am grateful to H. H. Lamb of the Meteorological Office for information on wind changes over the past 150 years. Storminess in the British Isles as a whole has decreased since about 1930 and this probably applies to the eastern North Atlantic in latitudes between 50° and 60° N (which includes St Kilda). Lamb says that there is reason to suppose that the years since about 1950 resemble the patterns of the nineteenth century more than they do the earlier part of the present century. "One would suppose that similar conditions to those now prevailing could be found by going back into the nineteenth century."

It is possible that the present long winter absence could be related to the Fulmars' food. The spread of the Fulmar has been related to the whaling and trawling industries and these may have changed their techniques, or geographical areas of operation, enough to produce the winter absence. The general warming of the climate from the seventeenth century to the 1950's has meant that the prevailing sea temperatures at all seasons of the year have risen gradually. This rise, which amounts to between 1° and 2°C since 1800 between St Kilda and about 20° W (H. H. Lamb, pers. comm.), may have affected the distribution of marine organisms and fish and hence the Fulmars' food. This, however, would be likely to alter the behaviour of Fulmars at other colonies, unless their feeding habits, or their distribution when at sea, differ from those of the St Kilda stock.

Neither climatic changes nor population factors seem to be directly related to the present longer absence of the Fulmar from St Kilda. This interesting change in habits does not appear to have been recorded elsewhere but might be looked for at other colonies.

ACKNOWLEDGMENTS

I am grateful to Dr D. G. Boddington, Dr J. B. Gallacher and D. W. Wilson for giving me their observations on Fulmars during autumn and winter, and additionally to Dr Boddington for his observations on breeding at the Glen Mor colony. My thanks are due to A. Anderson for reading drafts of this paper. I am indebted to H. H. Lamb for his information on changes in climate.

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SCOTS IN DENMARK

T. C. SMOUT

On the afternoon of 21st August 1963 some two dozen members of the S.O.C. arrived at the quay at Esbjerg in western Denmark. It was the first step in a ten-day tour of Danish reserves and notable bird localities organised by the Danish Institute in Edinburgh and Copenhagen: what follows is a brief account of what might be called the first club outing outwith Great Britain. The plan of campaign involved stopping a night in Esbjerg itself, a night at Nymindegab on the doorstep of Tipperne reserve, three nights at Skive in northern Jutland, crossing by night on the ferry to Copenhagen and spending the rest of the time there. A coach was at our disposal throughout and everything was facilitated by expert advice from Dr Finn Salomonsen on where to go, and incredibly good organisation by the Institute in booking hotels, obtaining permits for our excursions and planning the timing of the itinerary. We were thoroughly spoiled from start to finish.

The holiday got off with a bang on the first afternoon, when we drove down to the old city of Ribe, 30 miles south of Esbjerg, where every television aerial is decorated by Collared Doves, and ten pairs of White Storks still succeed in raising their young with superb indifference to the bustle of modern humanity in the streets a few feet below. Next day a drive north took us to the bird observatory at Blåvandshuk Light, on a spectacular coast of sand dunes and breakers, where the bushes were alive with Pied Flycatchers and warblers despite the west winds; then past Fiil Sö with Marsh Harriers wavering over the reeds, and into Nymindegab where we watched a party of 50 Crossbills bathing in a puddle (it is another invasion year in Denmark as well as in Scotland), while four Crested Larks played in the dust behind them. Tipperne on 23rd August was an object lesson in identification of marsh waders—Wood and Green Sandpipers, Greenshank, Spotted Redshank and Ruff feeding all over the waterlogged fields, with Grey Lag Geese and Marsh Harriers as a backcloth. Another great lighthouse at Norre Lyngvig produced a sensation with a Black Stork flying over—the species now only a vagrant to Denmark and a very great rarity by any standard. We wound up with a Gull-billed Tern on the coast and Crested Tits inland, arriving at Skive to a royal reception from the hotel, Union Jack and all.

It was our intention to use the town simply as a base for Limfjord, the great landlocked firth that bisects Jutland and contains on its shores many of Denmark's most exciting bird haunts. In fact, Skive and its neighbourhood proved worthwhile itself, with Crested Larks, Collared Doves and Nuthatches in the town, good marshes for Ruffs and the like, and at least one pair of Red-necked Grebes nesting nearby. Our first tour was to Bygholmsvejle, an impressive expanse of water meadow, reed, lake and marsh on Limfjord's northern shore—the size of these Jutland marshes is unbelievable to British eyes. We had no sooner entered the reserve than an Osprey rose from the nearest pool carrying a fish, and the usual Marsh Harriers swerved over the reeds. Half a mile further on we found a solitary Spoonbill and felt ourselves lucky, as Bygholm is Europe's northernmost breeding station of the species and not used every year. Clouds of duck and family parties of Grey Lag were waiting—and doubtless much else—in the background, but we never reached them:

a thunderstorm complete with waterspout tore over the lakes and collapsed on the dyke where we were pretending to shelter, and though hot coffee and Danish pastry at the nearest hotel restored our spirits, serious bird watching was over for the day. On the way home we saw another Gull-billed Tern.

Sunday 25th August brought us to Limfjord's eastern mouth, where a series of shallow lakes has formed behind the sea wall between Harboöre and Thyborön. Our experience of waders here surpassed everything—25 species in two hours, including Denmark's first record, subject to its acceptance, of Baird's Sandpiper, a single Broad-billed Sandpiper that settled for a moment with the Dunlin, a Temminck's Stint properly towering, hundreds of Little Stints and a good many Kentish Plovers. Most dramatic of all were the Avocets—116 flighting against a bright blue sky, with several scores of Black Terns feeding over the lake to add to the Mediterranean illusion. This is really the place for a month's holiday. Rold Skov next day provided a contrast and our only experience of a major Danish forest: ornithologically it was not exciting, apart from Buzzards and an Icterine Warbler, but the tour of the forest conducted personally by the chief forester in the Danish kingdom directing the bus down the narrow woodland rides was unforgettable. A pine marten ran across in front of the bus, and we saw roe deer, but the wild boar of Rold eluded us. By all accounts we may have been lucky.

The second half of the tour was centred on Copenhagen, but the climax here was undoubtedly the visit on 29th August to the famous Swedish observatory at Falsterbo on the opposite shore of the sound. Admittedly we picked the worst possible weather, with miserable sheets of rain falling from dawn to dusk, and consequently the major object of our excursion to see the great hawk migration was a wash-out. We saw hardly a score of Honey Buzzards, though our hospitable Swedish guide told us that 1100 had passed through the previous day—an interesting fact, but not a consolation. What we lost on the roundabouts, however, we made up on the swings, for as a locality for waders the marsh at Skanör, adjacent to Falsterbo, was second only to Jutland, with two Broad-billed Sandpipers, a Temminck's Stint, Kentish Plover, Avocet, Little Stint, and Black Terns and a Gull-billed Tern among others. There were also very large numbers of Willow Warblers and flycatchers around to provide the Sparrowhawks with an easy meal when they were stopped on passage.

Other excursions from Copenhagen were also rewarding—a Broad-billed Sandpiper, a Wryneck, a score of Red-backed Shrikes on the island of Saltholm, a wood that was ringing with Nuthatches and another Wryneck at Charlottenlund, an Osprey with more Honey Buzzards at Eremitage Castle, Barred and Icterine Warblers near Holte, and so on. It was not always necessary to travel far; a Barred Warbler spent three days in the garden of the hotel in central Copenhagen, and a couple of Honey Buzzards appeared soaring over the main shopping streets. By the time the writer left the main party at Copenhagen railway station on 1st September we had achieved a list of 132 species since leaving Newcastle, and three more were to be added on the way home. It was a fine tally for less than a fortnight in the north of Europe.

Necessarily this account has had to confine itself to birds, yet in many ways our happiest memories were of the people—the hospitable citizens who invited each of us to their homes in Esbjerg and Skive, Hr Jensen who drove the bus in Jutland and always found coffee when our spirits were failing, the lighthouse keeper who sang Auld Lang Syne in Danish, Hr Hvass the forester, the hoteliers at Skive and Copenhagen who put up with our odd ways with such courtesy. Some of us made remarkable duck counts after schnapps on the Swedish ferry, some of us became familiar and notorious figures in Tivoli, at least one of us was narrowly dissuaded from visiting a museum of contemporary art in his gumboots. Denmark took it all in good part: I think they would be glad to see another party from the S.O.C. any year it could be arranged.

A FALL OF MIGRANTS ON A NORTH SEA CROSSING

PAUL G. R. BARBIER

Our party of S.O.C. members and others, depleted of two of its number and its leader, returned from its bird studies in Denmark on M.S. *Parkeston,* sailing for Newcastle from Esbjerg on the evening of 1st September 1963. It had been a day of sunshine interrupted by heavy downpours, but the evening was clear and the sea calm when we sailed about 6 p.m. At sea before dark an Arctic Skua was seen and a Rock Pipit flew round the ship calling and once settled on a mast. Nothing foretold what was in store for us next day, 2nd September.

The weather roughened during the night and we awoke to find it raining, with a slight roll on deck and a force 2 NE wind. Before breakfast at 8 a.m. a Wheatear, a Wood Warbler and a Knot were reported around the ship, and two Black-headed Gulls were seen.

After breakfast we found several passerines flying round the ship or settling on the masts. They included a Spotted Flycatcher. one or two Willow Warblers, a Lesser Whitethroat, a female Redstart, and a female Blackbird seen on the Captain's bridge. A Golden Plover flew round and over the ship several times, and was succeeded by a Common Sandpiper. Astern a Sooty Shearwater came close enough for recognition. A mysterious warbler, eventually tracked down to within a yard, proved to be an immature Barred Warbler. Once it entered a coiled rope on the bridge, but eventually it perched for half an hour a yard from a Garden Warbler on the rung of a ladder against the funnel. At sea three Knot, ten Redshanks and a Ruff were seen.

The pace did not slacken in the afternoon. A Wheatear was still following at a varying distance without attempting to settle; at least six Redstarts, including two cock birds, flicked their chestnut tails just over the waves or dropped at the feet of ladies on the lowest deck; a minimum of six Willow Warblers, one resembling the northern form, followed the ship, one flitting through the tea lounge. A female Black Redstart was identified flying round the ship. Two Garden Warblers were seen at the same time, and two Lesser Whitethroats. A Meadow Pipit and two *alba* Wagtails came near, and a Swift flew south. The Barred Warbler and the Spotted Flycatcher had disappeared during the morning, but the others were still to be seen after 3 p.m. The last bird seen departing at the bar of the Tyne estuary was a Lesser Whitethroat, the star of the day for it had entirely commandeered the ship for its insect catching, flitting and settling with complete confidence within inches of the passengers.

At sea, besides huge flocks of Kittiwakes and Fulmars, six Great Skuas, four Arctic Skuas and a Pomarine Skua were seen, mostly in the early afternoon.

I understand that numbers of night migrants were recorded in eastern Scotland about this time. Recently such bird escorts have been recorded on Atlantic crossings (see *Brit. Birds* 56: 157), but comparable observations have also been made on North Sea crossings (see *antea* 1: 138).

A list of the birds seen is appended. The numbers of such species as Redstart and Willow Warbler are minima; birds were continually leaving, flying far out south, and then they or others returning to the ship. Details are also appended from the ship's log of its positions during the voyage and of weather conditions. I am indebted for these to the United Steamship Company Limited, Copenhagen, and wish to thank them for their courtesy.

LIST OF BIRDS SEEN, M.S. "PARKESTON," 2nd SEPTEMBER 1963

Fulmar—500+
Sooty Shearwater—1
Gannet—5+

Golden Plover—1
Common Sandpiper—1
Redshank—10

Knot—3
Ruff—1
Great Skua—6
Arctic Skua—4
Pomarine Skua—1
Great Black-backed Gull—100+
Black-headed Gull—2
Kittiwake—500+
Common/Arctic Tern—1
Guillemot—2
Swift—1
Blackbird—1
Wheatear—1
Redstart—6+
Black Redstart—1
Barred Warbler—1
Garden Warbler—2
Lesser Whitethroat—2
Willow Warbler—6+
Wood Warbler—1
Spotted Flycatcher—1
Meadow Pipit—1
"alba" Wagtail—2

SHIP'S LOG, M.S. "PARKESTON," 1st and 2nd SEPTEMBER 1963

Date and time	**Approximate position at end of each watch**	**Wind direction and strength**	**Weather, Barometer and Temperature**
1st 1600-2000	55°20' N 7°00' E	E 1	clouded 759 mm 15°C
2000-2400	55°15' N 5°20' E	E 1	light haze 759 mm 16°C
2nd 0000-0400	55°10' N 3°30' E	SW 1	rain/haze 759 mm 16°C
0400-0800	55°05' N 1°45' E	NE 2	rain/haze 756 mm 17°C
0800-1200	55°03' N 0°00'	NE 2	clouds/rain 756 mm 17°C
1200-1600	Tynemouth	NW 2	haze 755 mm 16°C

EUROPEAN MEETING ON WILDFOWL CONSERVATION

By invitation of the International Wildfowl Research Bureau and the Nature Conservancy, seventy delegates representing six international organisations and from seventeen countries met at St Andrews, Fife, from 16th to 18th October 1963, to discuss problems of international cooperation in wildfowl conservation in relation to provision for wildfowl management, administration and legal measures (such as regulation of close seasons), and coordinated international protection for endangered species (such as the Brent Goose).

Papers, circulated in advance, were spoken to briefly by delegates and were then followed by discussions; this procedure worked admirably and saved much valuable time. Subjects discussed were: the wildfowl situations in various European countries; the exploitation of migratory waterfowl populations in North America; wildfowl conservation laws and law enforcement; and wildfowl refuges in Europe and the Mediterranean area.

The Wildfowlers' Association of Great Britain and Ireland (W.A.G.B.I.) was represented by five delegates. In a paper on liaison between conservationists and shooting interests, the Hon. Secretary, Lt. Cdr. J. Anderton, stressed the close relationship which had now developed between his organisation and conservation interests in the suppression of irresponsible and indiscriminate shooting, the enforcement of laws protecting wildfowl, and the encouragement of rearing, ringing, and releasing wildfowl onto unshot Reserves. One's immediate reaction to all that Cdr. Anderton had to say was—what a pity it is that W.A.G.B.I. is not stronger in Scotland, and particularly in East Lothian where local wildfowlers show little interest in conservation measures at Aberlady Bay Nature Reserve.

On excursions before and after the conference, the delegates visited Culterty Field Station and the Ythan estuary; the Grouse and Moorland Ecology Unit at Blackhall, Banchory; Montrose Basin and some of the Angus lochs on which large numbers of geese and duck were seen; Loch Leven where the party were conveyed by boats from the sluices to land on St Serf's Island and the Castle Island; Lindores Loch; Dr John Berry's collection of geese at Tayfield; the Nature Conservancy's island reserves on Loch Lomond; Loch Ken; and the Barnacle Geese at Caerlaverock Nature Reserve.

The party was entertained by Mrs Purvis at Earlshall, Fife; by the Provost and Magistrates of St Andrews; and at a reception at Edinburgh Castle presided over by Lady Tweedsmuir.

George Waterston.

Footnote: The S.O.C. Bird Bookshop had a stand at the conference, and books to the value of £60 were sold to the Yugoslav delegates. Attention is drawn to the recent publication *Wildfowl in Great Britain*—monograph No. 3 of the Nature Conservancy, now obtainable, price 45/-, from the S.O.C. Bird Bookshop).

SHORT NOTES

WHITE-BILLED DIVER IN SOUTH-EAST SUTHERLAND

On 7th April 1963 I picked up a dead White-billed Diver on the shore of Loch Fleet, near Golspie. This is the first time the species has been recorded on the Sutherland coast although not the first in the Moray Basin (see *Scot. Nat.* 1955: 109; *Scot. Birds* 1: 91). Unfortunately the specimen was too decomposed for skinning or even for sexing. There was a large patch of oil on the breast, so death was possibly due to oil poisoning.

The most striking feature, apart from the shape and colour of the bill, was the great size compared with any of the other divers. The wing measured 381 mm but emaciation had reduced the weight to 6 lb 12 oz (3060 gm). I have been unable to find weights of palaearctic specimens, but the *Handbook of North American Birds* gives a range of 9¾ to 14 lb (4400-6400 gm) for adults of both sexes from Canada and Alaska. The wing measurements given are however of the chord, and cannot therefore be compared with those quoted in the major European works.

It seems reasonable to assume that the birds wintering in the North Sea are palaearctic breeders, especially in view of the observations made at Lista in 1952-1954 (*Sterna* 1(8): 31; 1(14): 16; 1(20): 30) which suggest a small but regular autumn passage round the south-west corner of Norway.

Plates 23-25 show the Loch Fleet bird laid out beside skins of the other divers, and demonstrate clearly the difference in the shape of the bill, and also the great bulk of the White-billed Diver compared with the others.

IAN D. PENNIE.

NIGHT HERON IN ORKNEY

On the morning of 1st November 1961 I came across a small black-and-white heron standing in a puddle at the door of the farm byre at Lower Crowrar, Rendall, Mainland, Orkney. Its body was about the size of a Herring Gull, and the short, thick neck was held upwards at an angle. The back of the head and the back were black, wings pale grey above, underparts whitish, bill blackish in colour and sharp-pointed, and the thick legs were yellowish-grey and projected only a little beyond the tail in flight. When flushed, the bird flew off only a short distance and gave me a second view when it alighted near a henhouse. It then flew away and was not seen again. I later saw a film of a Night Heron on television and immediately recognised it as the same bird. There had been a strong southerly gale the previous night which probably accounted for the occurrence of this species so far north.

JAMES HALCRO.

(We are indebted to E. Balfour for this report. It is the first record of the Night Heron in Orkney and the most northerly occurrence in Britain so far. It is, however, impossible to be certain that this bird was not an escape from the free-flying colony at Edinburgh Zoo.—Ed.).

RING-NECKED DUCK IN INVERNESS-SHIRE
A NEW SCOTTISH BIRD

At 1220 hrs on 2nd January 1963 we were looking for birds on Loch Morar in western Inverness-shire. In a small bay on the north side of the loch between North Morar and Bracora we found a small duck swimming in sheltered water close to the bank. It was resting and we were able to examine it from the car at a range of 40 yards. Whenever it raised its head from the sleeping position we were struck by the unusual shape of the head and the distinctive bill markings, diagnostic features of the Ring-necked Duck *Aythya collaris* from North America.

We watched the bird for about fifteen minutes, and got the impression that it was weak and tired, because it was continually sleeping and keeping to the calm water close to the bank. It was loathe to fly when we approached, but finally it took flight and we were able to see the distinctive wing pattern. It flew about 200 yards and landed in rough water, where we left it. Thirty minutes later the bird had returned to its original location, and we again watched it while it rested, and compiled our field notes before flushing it once more. This time it flew right out into the loch.

We had to leave the loch, but we were certain from the description that the bird was a Ring-necked Duck, though reserving a final decision until we could examine the literature. In the meantime we contacted several ornithologists in the hope that they might be able to see the bird and confirm our sighting, but unfortunately, owing to the remoteness of Loch Morar, none of them was able to get there.

On 27th January we made a special journey to Loch Morar and were rewarded by finding the Ring-necked Duck in company with other diving ducks in a bay a little west of the original location. Conditions were more favourable for viewing the bird and we were able to watch it for over half an hour from 1230 hrs. Also in that area of the loch were five Pochard, ten Tufted Ducks and about 20 Goldeneye. The Ring-necked Duck was diving in shallow water with the Pochard; the Tufted Duck were feeding in deeper water; and the Goldeneye were scattered over the loch. The bird now looked healthy and in good condition, very different from its appearance on the 2nd. Its plumage was clean and bright in the good light and we obtained excellent views with a telescope from 50 to 100 yards range. When flushed it flew off with the Pochard and Tufted Duck and we were able to compare them in flight. The mixed flock landed out on the loch, but when we looked at them fifteen minutes later only the Tufted Ducks remained feeding and diving in the deep water, the others evidently having returned to the shallower bays to feed.

The following description is taken from our field notes made on 2nd and 27th January:

Head and upperparts dark brownish grey, much the same as a female Tufted Duck but cleaner; flanks paler, with clean demarcation of dark breast and tail, and noticeable peaked shape towards the neck; underparts paler but not so pale as female Tufted; bill most distinct, grey with two bright white rings, one half an inch from tip and other round base, the latter obvious and clear-cut, not at all like the white muzzle effect of some duck Tufted; tip of bill darker, grey; eye pale on 2nd but golden brown on 27th in better light; legs and feet apparently dark in flight; wings dark brownish-black with thick grey trailing edge, more so on secondaries, and very distinctive in flight, especially when in company with Tufted Ducks; head high crowned and triangular, very easily seen at a distance when with Tufted; no crest blowing in the wind; head seemed wider than Tufted's when viewed from in front. When alarmed the bird stretched its neck and held its head high, when the shape of the head was very noticeable. On the 2nd, when disturbed, it submerged part of its body when it swam away; not keen to fly. On the 27th its general appearance was much blacker, with the flank area paler and more distinct and much cleaner than on the 2nd. When we saw the bird on the 2nd we were under the impression that it was a female, but after we had consulted the books two details worried us; these were the lack of a white mark round the eye, and the pale eye; but against these discrepancies the combination of the bill markings, head shape, and wing pattern convinced us of its identity. On the 27th we paid attention to these points and it was then that we concluded that this was a young or retarded drake. The very bright bill and eye, the distinctive flank pattern and head shape, and the general blackish appearance tended to support this suggestion. One would expect the Ring-necked Duck to have a similar moult sequence to our Tufted Duck, and in my experience in winter the rather blackish female-like Tufties have proved to be drakes when trapped and examined. These dark specimens may not attain full male plumage until February or March.

North American wildfowl were in evidence during the winter, and locally I recorded a drake Green-winged Teal at Inverness during February (*antea* 2: 418). The Ring-necked Duck at Loch Morar is the first Scottish and fourth British record. Single drakes have been recorded previously in Gloucestershire from 12th to 14th March 1955 (*Brit. Birds* 48: 377); in Berkshire from 19th to 27th April 1959 (*ibid* 52: 427); and in Co. Armagh from 20th March to 1st May 1960 and again from 25th September 1960 to 1st January 1961 (*ibid* 54: 72). There is also an old record of one said to have come from the Lincolnshire fens and exposed for sale in Leadenhall Market, London, in January 1801. It is unlikely that any of these birds were escapes as the species is not often kept in captivity.

ROY H. DENNIS, MARINA T. MACDONELL.

MONTAGU'S HARRIER IN ABERDEENSHIRE

On 26th May 1963 R. G. Brown found a dead harrier lying in grass near the estuary of the Ythan at Waterside, Newburgh. The body was subsequently given to me and proved to be a female Montagu's Harrier. Professor V. C. Wynne-Edwards confirmed the identification. Collision with overhead wires seemed to be the cause of death. This appears to be the first record for Dee and Aberdeen, and is of interest in view of the tendency for this species to extend northwards since the war, breeding in Scotland in South Perth in 1952 and Kirkcudbright in 1953.

A. ANDERSON.

COLLARED FLYCATCHER IN ORKNEY

On the afternoon of 30th May 1963 George Flett and I examined at quite close range a cock Collared Flycatcher at Newhill, Harray. It was flitting and darting about an elder hedge, a ditch and a fence, catching insects and occasionally perching.

Identical in size to a Pied Flycatcher, it had a fairly broad white ring round the back of the neck, an almost circular white patch on the forehead—about twice as large as on the Pied Flycatcher—and rather more white on the wings than the Pied. Upperparts: head, mantle, back and tail black; rump whitish or dirty white; dark parts of wings rather brownish. Underparts white from the chin. Bill and legs blackish; iris brown. If there was any white on the sides of the tail we failed to make it out on such a restless bird.

This is the first time the species has been recognised in Orkney.

EDWARD BALFOUR.

(The only previous Scottish record of the Collared Flycatcher was on 11th May 1947 when an adult cock was shot on Whalsay in Shetland.—ED.).

CROSSBILLS BREEDING IN ANGUS

In May 1963 I received from George M. Crighton a nest found in a conifer which had just been felled in Kinnaird Park, near Bridge of Dun. Crossbills had been present in

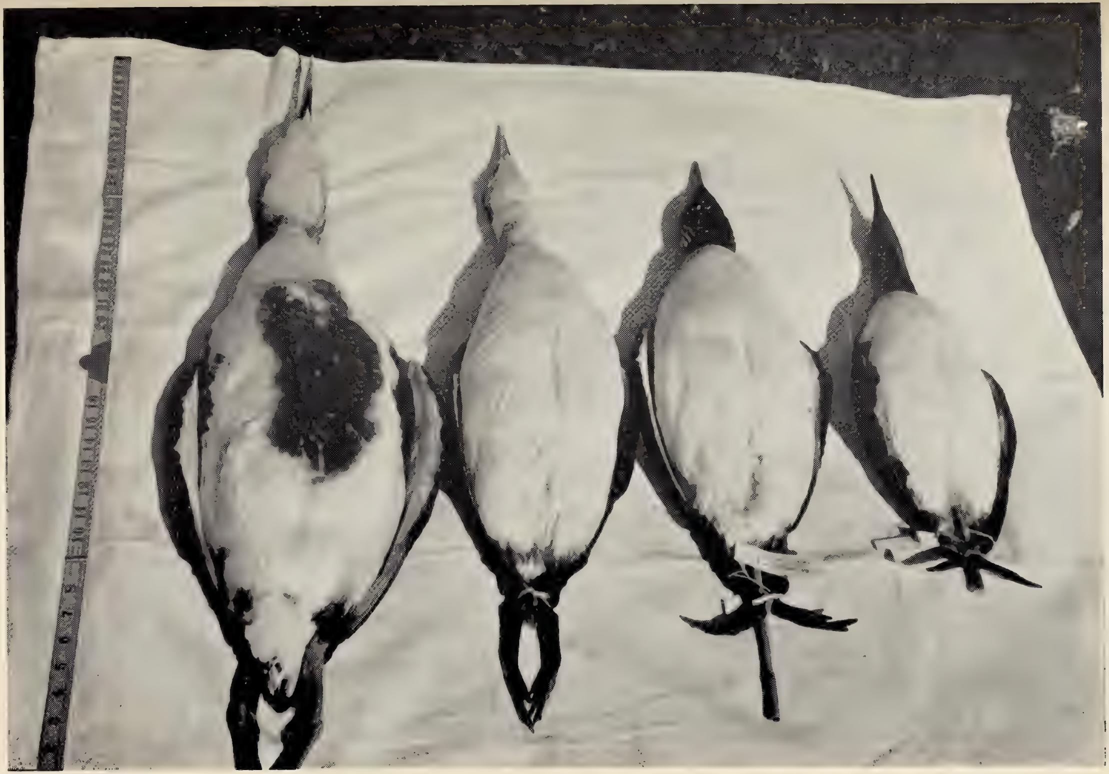

PLATE 23. WHITE-BILLED DIVER (with soiled breast) and skins of female (*left to right*) Great Northern, Black-throated and Red-throated Divers, illustrating the relative sizes of the birds (see page 474).

Photograph by Ian D. Pennie.

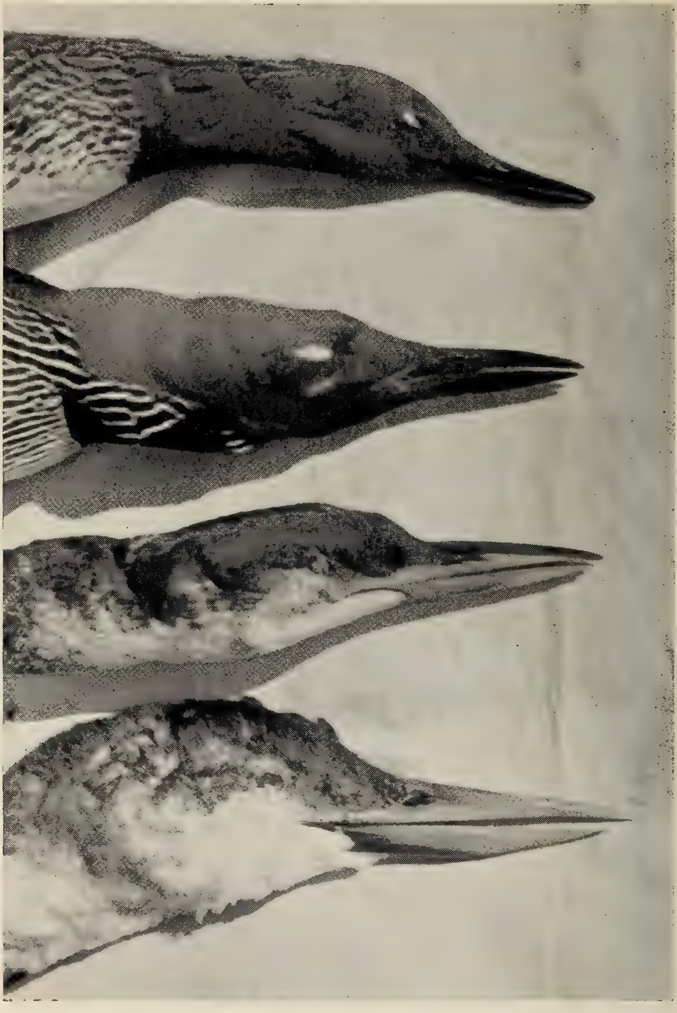

PLATE 24. Heads and bills of same four birds as on Plate 23. *Bottom to top*: White-billed, Great Northern, Black-throated and Red-throated Divers (see page 474).

Photograph by Ian D. Pennie.

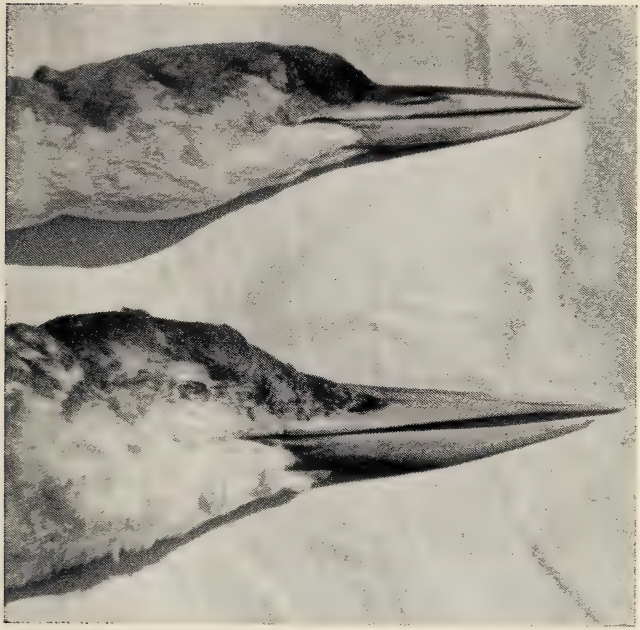

PLATE 25. Heads and bills of White-billed Diver (*lower*) and Great Northern Diver (skin). Note the very heavy bill of the White-billed Diver and the sharply tip-tilted lower mandible that gives it its characteristic shape (see page 474).

Photograph by Ian D. Pennie.

PLATE 26. The late Betty Garden helping in the caravan kitchen at the R.S.P.B. Osprey watchers' base camp.

Photograph by James MacGeoch.

this area since September 1962 and recently a hen Crossbill had been seen repeatedly in the group of trees which had been felled. The nest has been examined by William Marshall and Roy H. Dennis, both of whom are familiar with the species in Speyside, and they have confirmed that it is indeed the nest of a Crossbill.

HENRY BOASE.

(This is the first acceptable breeding record for Angus, and it seems likely that the birds concerned were survivors of the big Crossbill irruption that took place in the summer and autumn of 1962.—ED.).

CURRENT NOTES

(**Key to initials of observers :** A. F. Airey, D. C. Anderson, D. R. Anderson, D. G. Andrew, R. St J. Andrew, J. Ballantyne, Miss P. G. Baxter, T. H. Bell, G. Bennett, H. Boase, T. Boyd, W. Brotherston, A. G. S. Bryson, R. G. Caldow, W. N. Carruthers, Dr M. E. Castle, T. Cockburn, Sir C. G. Connell, W. A. Craw, H. G. Cree, G. M. Crighton, W. A. J. Cunningham, P. E. Davis, G. Dick, R. C. Dickson, H. E. M. Dott, J. Dunbar, Miss C. F. Dunsire, N. Elkins, H. A. Ford, M. Forrester, Miss E. M. Gall, A. G. Gordon, Miss F. Greig, J. A. D. Hope, Dr D. Jenkins, D. B. Kirke, Miss H. Knight, L. W. Lloyd, A. Macdonald, D. Macdonald (DM), Miss J. McFarlane (JMcF), K. S. Macgregor, A. T. Macmillan, Miss D. MacRobert (DMacR), J. Maxwell (JM), W. S. Medlicott, Prof. M. F. M. Meiklejohn, T. D. H. Merrie, C. M. Morrison, R. Murray, C. Ogston, D. W. Oliver, N. Picozzi, J. Potter, A. F. Pratt, R. M. Ramage, G. A. Richards, E. L. Roberts, Lt.-Cdr. C. P. Ross, H. M. Russell, G. L. Sandeman, A. J. Smith, R. T. Smith, R. W. J. Smith, Mrs A.-M. Smout, Dr T. C. Smout, T. Spence, D. Stalker, W. Stein, I. F. Stewart, J. H. Swan, Dr A. Tait, C. Tait, Miss V. M. Thom, L. A. Urquhart, D. I. M. Wallace, Col. R. Wallace, G. Waterston, Mrs M. I. Waterston, Dr A. Watson, A. D. Watson, Dr R. S. Weir, T. Weir, J. Wightman, D. P. Willis, W. Wyper, J. Young, J. G. Young, B. Zonfrillo.
Unless otherwise stated all dates refer to 1963.)

Distribution

This section does not include observations made before 1st June. Notes on individual species follow the introductory paragraphs on a noteworthy arrival of migrants. Current Notes for the next number should reach the editor by the end of the year.

Easterly winds from 29th August to 2nd September brought a spectacular fall of night migrants to the east coast; this movement was at its peak from 31st August to 2nd September, during which time nearly 200 birds were ringed on the Isle of May, including 2 **Wrynecks,** 10 **Whinchats,** 18 **Redstarts,** 8 **Barred Warblers,** 75 **Garden Warblers,** 32 **Willow Warblers** and 18 **Pied Flycatchers**; other birds included **Reed/Marsh Warblers, Lesser Whitethroat** and **Red-backed Shrike,** species noted elsewhere in Forth at this time (IFS per AM).

At Barns Ness, East Lothian, in a small area of cover on 31st August there were **Wheatears, Whinchats, Redstarts, Garden** and **Willow Warblers, Whitethroat, Pied Flycatchers,** and a **Wryneck** which stayed for at least nine days; a **Lesser Whitethroat, Spotted Flycatchers,** and two immature **Red-backed Shrikes** which lingered for a week, were first seen on 3rd September; and a **Black Redstart** which stayed for four days was found on the 5th (AM, ATM, AJS, RWJS, CT).

Details are given on another page of a Noah's Ark crossing of the North Sea on 2nd September, when the ship was accompanied by a fine variety of passerines. At Elie, Fife, that day there was a host of migrants which included **Wheatears, Redstarts** and **Garden Warbler** (DWO).

Mainland records of **Wrynecks** were a feature of this movement. As well as birds already noted at Barns Ness and on the Isle of May one was found in an Aberdeen garden at this time (per DJ); one was seen by the Eden estuary on 5th September, the first in the Tentsmuir area as defined by Grierson (*antea* 2: 113) (DWO); another was at Fife Ness the same day (PGB); and one was seen in Gullane, East Lothian, on the 4th and 7th (CPR).

In addition to the **Red-backed Shrikes** at Barns Ness and on the Isle of May one was seen at Fife Ness on 6th September (PGB).

Twelve **Great Crested Grebes** at Port Allen, Perthshire, on 13th July were a good number to be on the sea at that date (HB). Two **Red-necked Grebes** were at Gullane Point, East Lothian, on 27th July (CT, RWJS), and one was there on 24th August (AGG, TDHM). In the Sound of Gigha there were already seven **Slavonian Grebes** on 15th September (AGG, TDHM).

Large numbers of **Manx Shearwaters** were in the Sound of Mull off Lismore on 31st July, and especially on 15th August when thousands were seen over the calm waters; nothing like this was seen in the same area in August 1962 (WAC); very many were seen also on 25th August in the Firth of Lorne, especially off Lismore, and thinning out up the Sound of Mull as far as Scallastle Bay; numbers were noted off the north shore of Iona and between Mull and Treshnish until the end of the month (THB). On 16th August a **Sooty Shearwater** was seen in the Forth 1½ miles NE of Inchkeith; parties of Manx Shearwaters were fairly numerous in mid Forth as far up as Burntisland (JW).

Three pairs of **Fulmars** were on a cliff about 75 yds from the sea at Ben Feall, Coll, on 7th July, but no eggs were seen; there is no previous record for the island (see *Brit. Birds* 51: 46) (CT). At Buchan Ness, Aberdeenshire, Fulmars were passing north during a three hour watch on the afternoon of 13th August at the rate of 300 per hour; three days later the rate was only 120 per hour, and some were also moving south so that this was possibly a local feeding movement (DPW). Inland records include single birds flying south at Fairmilehead, Edinburgh, on 14th and 24th August (HAF), a dead bird at the mouth of the Endrick, Dunbartonshire, on the 25th (TDHM), and one picked up alive at Stormont Loch, near Blairgowrie, Perthshire, on 15th September and released at Arbroath (VMT).

At least 30 **Gannets**—5 adults, 25 juveniles—were diving and resting at Seafield, Leith, especially at the outfall of the sewage pipes, on 8th September (ATM), and numbers were noted further up the Forth as well, with 60—2 adults and the rest juveniles—in Grangemouth Bay on the 14th, following several days of strong winds (GD, JP). In Edinburgh an exhausted juvenile was caught at Duddingston Loch on the 19th (DRA).

On 11th July at Grishipoll Point, Coll, some 70 adult and juvenile **Shags** were counted, some of the young birds still being fed by the adults, and nine nests still holding eggs or young. There is no previous breeding record for Coll (*Brit. Birds* 51: 46), but this site would not readily be seen without a scramble (CT).

The drake **Garganey** previously noted at the Endrick mouth (*antea* 2: 434) was seen on various dates from 21st April to 2nd June, but no duck was seen (DS). Single **Gadwall** were noted often this summer on Kilconquhar Loch, Fife, with a maximum count of five on 6th August (DWO); four were at Caerlaverock, Dumfriesshire, on the 18th (ELR).

Single drake **Scaup** were inland on Lintrathen Reservoir, Angus, on 24th June (HB); Kilconquhar Loch, Fife, on 19th July (DWO); and Gladhouse Reservoir, Midlothian, on 8th September (DGA). The usual late records of **Goldeneye** include two at Lintrathen on 24th June (HB), and four at Kilconquhar on 11th June, with two immature birds still there on 17th July (DWO). At Gladhouse an immature bird was seen on 2nd and 23rd June, and two (apparently an adult pair) remained from 7th July to 11th August (DGA, RWJS). A drake **Velvet Scoter**, a scarce species in the west, was in the Sound of Gigha on 15th September (AGG, TDHM).

A duck **Goosander** had two small ducklings on Loch Bhasapoll, Tiree, on 3rd July; the species has apparently not been recorded on Tiree this century (*Brit. Birds* 51: 49) (CT). At Tyninghame, East Lothian, there were seven on the estuary on 25th August and nine on the 31st (CT), while further up the Forth two were at Cramond on 29th August (RM). In mid summer a raft of 25 **Red-breasted Mergansers** was on the sea near Glenluce, Wigtownshire, on 6th July (AFA); at Gullane Point, East Lothian, in autumn there were as many as 170 on 17th September (HAF).

Summer records of **Grey Lag Geese** of doubtful significance are of the bird previously noted on the Eden estuary, Fife, from 18th May (*antea* 2: 434) remaining there throughout the summer (JMcF, DWO), three at Port Allen, Perthshire, on 15th August and two there on the 27th, on which date three were on Marlee Loch, Perthshire (HB). On 17th August there was one at Loch of Auchlossan, Aberdeenshire (DGA). During the night of 25th/26th September Grey Lag were heard over Loch Stack, Sutherland, and in the morning a party of twenty were sheltering there in a gale (GW, MIW). On the 26th a party of 25 Grey Lag flew south over Banchory, Kincardineshire, and geese were heard over Aberdeen in the evening (FG). At least 40 were over Kinnordy, Angus, on the 30th (HB).

A **Pink-footed Goose** came to roost at Hule Moss, Berwickshire, in the early morning on 25th August (per WB). A spectacular arrival of this species was recorded at the end of September. At 1800 hrs on the 26th several large skeins were flying steadily south over the Cairngorms near Boat of Garten into the teeth of a SW gale, and this was still going on early next morning (GW, MIW). On the 27th Pinkfeet were noted in many places: on the Tay estuary there were about 1600, a few having been heard the night before (HB); at Perth hundreds passed over on the 27th and 28th (VMT); they were heard over St Andrews at 0630 hrs on the 27th, and at Lundin Links, Fife, three hours later, with 45 more next morning (RSW); at Loch Leven, Kinross-shire, numbers were resting about St Serf's Island at midday on the 27th (GW, MIW); over Edinburgh the first geese were flying south at 0915 hrs (JB), and 44 were seen moving west over George Square (TCS); in the Fala/Gladhouse area of Midlothian large numbers arrived on the 27th and 28th with virtually none of the previous build-up of an advance guard of 300/600 which has been noted in recent years (WB); the first 40 reached Caerlaverock, Dumfriesshire, also on the 27th (ELR). By 3rd October there were at least 3000 on the Tay (HB). This massive influx on 26th/28th September was evidently related to the onset of severe snowstorms in Iceland on the 24th.

A winged **Barnacle Goose** was seen at Nairn on 11th July (MFMM), and a very tame one on the saltings at Bridgend was recorded throughout a visit to Islay from 24th to 30th August (MF). The first 17 of the autumn reached Caerlaverock on 1st October (ELR). Records of **Canada Geese** include two which flew into Portnahaven School playground, Islay, on 4th June, perhaps from Colonsay (HK); one flushed from Craigleith in the Forth on 7th August (GW); five rather tame birds at Gadloch, Lanarkshire, on 6th September (HGC); and two rather shyer birds at the west end of Loch Tummel, Perthshire, on the 10th (HB). It can be seen that occurrences of this species leave a lot to be desired.

There are the usual reports of **Whooper Swans** in summer, which include single birds at different lochs on South Uist on 4th and 9th July (TDHM); one on Loch nan Eala, Arisaig, Inverness-shire, throughout the summer (AFP); an adult in Montrose Basin on 26th June; and an immature at Forfar Loch from 11th June until at least 8th August (HB). The first birds of the autumn were 14 flying south at Stornoway, Lewis, on 28th September (NE), and six at Gadloch, Lanarkshire, the same day (BZ); seven adults were at Loch Ken on the 30th (AFA); three adults were at Tayport, Fife, on 1st October (HB), and also one at Caerlaverock, where numbers increased to five on the 3rd and seven—all adults—on the 6th (ELR); there were five by Loch Leven, Kinross-shire on the 4th (RSW).

Two rather early **Rough-legged Buzzards** were seen together three miles south of Strachur, Argyll, over open moorland on 9th September (DCA), and one flew over Gartocharn, Dunbartonshire, on the morning of the 15th (TW). A **Marsh Harrier**, possibly the same bird seen on 5th May (*antea* 2: 435), flew across the airfield by the Loch of Strathbeg, Aberdeenshire, on 10th August (DPW). Reports of "ring-tail" harriers, all probably **Hen Harriers** from the descriptions, refer to single birds at Barr Loch, Renfrewshire, on 24th August (RGC); Fala Moor, Midlothian, on 25th August; and the Dewar Burn in the same area on 22nd September (WB). An **Osprey**, the first recorded for Tentsmuir, was seen soaring over Earlshall and the Eden estuary on 28th July; it stayed in the area until at least 11th August (CFD, DWO).

At Dornoch on 29th June a **Quail** was heard calling in a field of barley near where one was previously noted on 11th June 1959 (*antea* 1: 130) (DM). In view of the paucity of breeding records of the **Water Rail** it is worth recording a juvenile which was disturbed from reeds at Barr Meadows, Renfrewshire, on 29th July, and watched swimming across some open water (RCD).

A **Grey Plover** was present at Stornoway, where it is a scarce bird, from 25th September until at least the end of the month (WAJC, NE); at Skinflats, Stirlingshire, at least 70 were counted on 21st September (AGG, TDHM). On 24th August there were as many as 2000 **Golden Plover** on the Eden estuary (CT).

Black-tailed Godwits are reported from:

L. Indaal, Islay—1 on 29th Aug (MF).
Eden Estuary, Fife—21/22 on 21st July (JMcF, CT), 31 on 28th July (DWO), 15 on 18th Sept (DJ, TS).

Elie, Fife—3 on 3rd Aug and 2nd Sept (DWO).
Aberlady, East Lothian—1 on 8th Sept (JADH).
Doonfoot, Ayr—1 on 24th Aug (GAR).
Caerlaverock, Dumfries—9th Aug (1), 13th (20), 18th/21st (50+), 28th (15) (ELR).

A **Bar-tailed Godwit** was inland at Gadloch, Lanarkshire, on 18th August (WW, BZ).

Green Sandpipers are reported from:

L. Indaal, Islay—1 on 28th Aug (MF).
L. of Strathbeg, Aberdeen—3 on 6th and 10th Aug (DPW).
Ythan Estuary, Aberdeen—1 on 6th Aug (CO).
R. Don, Kinaldie, Aberdeen—2 on 9th Aug (CO).
Montrose Basin, Angus—1 on 4th, 13th and 18th Aug and 1st Sept (GMC, JD).
Port Allen, Perth—1 on 15th Aug (HB).
Kinconquhar Loch, Fife—1 on 18th Sept (DWO).
Aberlady—1 on 11th (GB) and 20th Aug (DIMW).
Tyninghame, East Lothian—1 on 25th Aug (TB, EMG, RWJS, CT) and 3rd Sept (HEMD).
Rosebery, Midlothian—1 on 15th Sept (RStJA).
Caerlaverock—1 on 13th and 28th Aug and 1st Sept (ELR).

Now that **Wood Sandpipers** have been found breeding in Scotland a few summer records are to be expected from places where they do not breed. On 7th June, but not next day, there were two at Bridgend, Islay (JM, RTS, JY, JGY); and at Loch Hallan, South Uist, one was seen on 11th July (TDHM). Autumn migrants are reported from:

Endrick mouth, L. Lomond— 1 on 25th Aug (TDHM).
Aberlady—1 on 20th Aug (DIMW).
Tyninghame—1 on 18th Aug (EMG, RWJS).
Barns Ness, East Lothian—1 on 7th and 8th Sept (KSM, ATM).

Spotted Redshanks are reported from:

Ythan Estuary—3 on 14th Aug (DGA).
Montrose Basin—8th Aug (2), 11th (2), 13th (2), 15th (3), 18th (1), 22nd (2), 28th (1), 1st Sept (3) (GMC, JD).
Eden Estuary—2 on 15th Sept (DWO).
Cult Ness, Fife—1 on 13th Aug, 19th Sept (GD, JP), and 21st Sept (AGG, TDHM).
Caerlaverock—13th Aug (3), 18th (6+), 21st (4), 28th (10), 1st/2nd Sept (12+), 9th (1), 2nd Oct (15+) (ELR).

At Caerlaverock the first **Greenshank** of the autumn migration was seen on 8th July; from eight on 13th August numbers increased steadily to 50^+ on the 18th and 60^+ on 27th/28th; there were 20^+ on 3rd September and numbers steadily dropped after that (ELR). Inland records are of two in summer as far south as Sior Loch, south of Taynuilt, Argyll, on 13th July (JB); one at Morton Lochs, Fife, on 7th August (DWO); one at Gadloch, Lanarkshire, on 18th August (WW, BZ); one at Glenburn Reservoir, Paisley, on 31st July (RGC); two at Hamilton on 15th August (RMR); one at Roughrigg Reservoir, near Airdrie, on 17th August (WS); one at Fala Flow, Midlothian, on 1st August (WB); three at Gladhouse, Midlothian, on 11th August (RWJS) and one on the 19th (DGA); and single birds at Rosebery Reservoir, Midlothian, on 25th August and 15th September (DGA). This species cannot be considered very uncommon inland on autumn migration.

Little Stints are reported from:

Ythan Estuary—1 on 8th Sept (AW).
Montrose Basin—22nd Aug (2), 23rd (3), 26th (1), 28th (3), 1st Sept (2) (GMC, JD).
Eden Estuary—1 on 24th Aug, 1st Sept (CT), and 7th Sept (PGB).
Cult Ness—2 on 10th and 17th Sept (GD, JP).
Aberlady—6th Sept (5) (RM), 8th (3) (JADH), and 14th (1) (HEMD).
Tyninghame—18th Aug (1), 25th (5) and 31st (4) (TB, EMG, RWJS, CT).
Skinflats, Stirling—1 on 24th Aug (GD, JP).
Troon, Ayr—1 every day 4th/9th Sept (MF, RMR, GAR).

A **Curlew Sandpiper** in summer plumage was seen at L. Riaghain, Tiree, on the very unusual date of 29th June; the species has not been recorded on the island since last century (*Brit. Birds* 51: 55) (CT). Curlew Sandpipers have been unusually numerous this autumn and are reported from many places, almost all of them since 21st August:

Stornoway—1 on 21st Aug and 2 on the 22nd (NE).
L. Indaal, Islay—1 on 28th Aug and 2 on the 29th (MF).
Dornoch Burn, S.E. Sutherland—1 on 1st/2nd Sept where one was previously noted in 1948 ("Scot. Nat." 1949: 125), overlooked in "The Birds of Scotland" although the first county record (DM).
Newburgh, Aberdeen—4 in flooded field on 6th Sept (DJ).
Ythan Estuary—1 near last on 8th Sept (AW).
Montrose Basin—22nd Aug (5), 23rd (11), 26th (4), 1st Sept (5), and 7th (no less than 47) (GMC, JD).
Eden Estuary—1 on 15th Sept (DWO), 6 on the 18th (DJ, TS).
Fife Ness—2 on 3rd Sept and 3 on the 6th (PGB, RSW).
Cult Ness—1 on 10th Sept, 4 on 17th and 8 on 19th (GD, JP).
Musselburgh, Midlothian—4 on 11th Sept (JB).
Aberlady—1 on 8th Sept (JADH).
Tyninghame—4 on 25th Aug and 6 on 31st (TB, EMG, RWJS, CT).
Skinflats—24th Aug (4), 7th Sept (1), 14th (2), 15th (34 at high tide by Kincardine Bridge), and 21st (4) (GD, JP).
Bogside, Irvine, Ayr—7 on 10th Sept (GAR).
Troon—31st Aug (4), 2nd Sept (3), 3rd (4) (GAR), 4th (8) (MF), 5th (4), 6th (10), 9th, 10th and 14th (2) (GAR), and 16th (13) (RGC).
Doonfoot, Ayr—1 early bird on 2nd Aug (RMR).
Carsethorn, Kirkcudbright—5 on 15th and 19th Sept (JGY).
Caerlaverock—3 on 9th Sept, 1 on 10th Sept and 1st Oct (ELR).

An interesting record of a **Ruff** is one of a female from 9th to 13th July at a small pool in a field at Seafield, Roslin, Midlothian (TC per RWJS). Some observers do not report all the Ruffs which they see, but the usual numerous reports which we have received are noted below, the first birds being recorded on 4th August:

L. of Strathbeg, Aberdeen—1 on 4th and 9th Sept (DPW).
Between Cruden Bay and Collieston, Aberdeen—17 and 8 on two stretches of floodwater on 8th Sept (AW).
Newburgh, Aberdeen—21 in flooded field on 6th Sept (DJ), 17 on 8th,

but none on 10th when pool dried up (AW).
L. of Auchlossan, Aberdeen—2 on 17th Aug (DGA).
Montrose Basin—4th Aug (1), 6th (7), 8th (2), 11th (6), 15th, 18th, 22nd and 31st (1), and 1st Sept (5) (GMC, JD).
Easthaven, Angus—1 on 12th Sept (HB).
Eden Estuary—7th Aug (13) (DWO), 18th (8), 24th (9) (CT), and 5th Sept (6) (DWO).
Elie—7 on 2nd Sept (DWO).
Cult Ness—8th Aug (11), 13th (8), 19th (10), 10th Sept (3), 17th (2) (GD, JP), and 21st (1) (AGG, TDHM).
Aberlady—1 on 11th Aug (GB), 2 on 20th (DIMW).
Tyninghame—highest count 15 on 18th Aug (TB, EMG, RWJS), 8 on 3rd Sept (HEMD).
Fala Moor, Midlothian—1 on 25th Aug (WB).
Skinflats—17th Aug (3), 24th (8), 7th and 15th Sept (1), 21st (2), and 28th (4) (GD, JP).
Smedheugh, Selkirk—immature male on rainwater pools from 18th to 24th Sept, believed to be a new record for the county (AJS).
Caerlaverock—6th Aug (1), 18th (4), and up to 12+ till 29th Sept; 3 to 5 from 1st to 5th Oct (ELR).

A **Red-necked Phalarope** in winter plumage at Caerlaverock on 31st August seems to be the first recorded in Dumfriesshire (ELR, HMR, RTS, ADW).

A **Great Skua** was seen in summer off Tiree on 1st July (TDHM).

South of Boddam, Aberdeenshire, **Herring Gulls** have this summer spread over the top of the cliffs onto the fields, and at one colony there were about a dozen nests in a large area of chickweed and one on a low grass-topped drystone dyke (DPW). Three pairs of **Common Gulls** nested successfully at Lochside, Sanquhar, Dumfriesshire, where they first bred in 1962 (*antea* 2: 349) (JGY). An immature **Glaucous Gull** which came to the fish gutting on a boat off Boddam on 31st July was bolder than the Herring Gulls and approached within 4 feet of the observer (DPW). Another immature was seen at Barassie, Ayrshire, on 14th September (RMR, GAR, DS). An immature **Iceland Gull** at Stornoway airport from 14th July was still about at the beginning of October, and an albino Herring Gull was also in the area (WAJC).

At the Buddon Burn, Monifieth, Angus, two **Little Gulls** were seen on 19th August and one on the 29th (HB); eight flew west at Elie Ness, Fife, during a 30 minute watch on 15th September (DWO); and one was at Cult Ness on 26th July (GD, JP). When compared with numbers at Kilconquhar Loch the sparseness of these records serves to emphasise how extraordinarily local this species is in its occurrences. Early in July numbers at Kilconquhar Loch averaged five, but there were nine on the 7th and 13 on the 15th, all adult except for one 1st summer bird; thereafter numbers built up steadily for a month, with counts on 21st/22nd July (38), 23rd (54), 24th (81), 25th (123), 26th (142), 27th (147), 1st August (318), 6th (309), 9th (412), 11th (342), 15th (443), 18th (512), 20th (346), and

22nd (512); after this there were fewer, and numbers became very variable; 1st summer birds included in these totals were counted or estimated, and increased from three on 21st July to 20 on the 25th, 40 by 1st August, about 60% of the total on 18th August, and even more on the 22nd; juveniles were first seen on 6th August, and comprised some 10% of the total on the 18th (DWO).

There were two **Black Terns** with the Little Gulls at Kilconquhar Loch on 26th August (PGB); one at Forvie on the Ythan estuary, Aberdeenshire, on 9th September (NP); and one in the Outer Hebrides, where it is a rare bird, at Stornoway on 24th September (NE). Migrant **Common** or **Arctic Terns** were reported at Hilda Marshes, Glasgow, on 4th July when 25 flew SE calling loudly (WW); and ten setting off south up the River Esk at Musselburgh, Midlothian, on 18th August (DIMW). In Renfrewshire there were two and sometimes four **Common Terns** at Barr Loch between 19th May and 15th August, but no evidence of breeding; two were at Black Loch on 28th July (RCD). Seven terns feeding over one of the ponds at Hamilton on 15th August were thought to be **Arctic Terns**, the first for Lanarkshire, but it was not possible completely to rule out the chance that they were Common Terns (RMR). **Little Terns** were noted in Kilnaughton Bay, Port Ellen, Islay, on 11th June (4), 13th (17), 14th (5), 18th (8) and 21st (2), but no breeding site was found (HK).

Turtle Doves in the north of Scotland during September occurred near Dornoch, Sutherland, on the 8th (DM); 12 miles from Stornoway on the 20th, an immature bird with an injured wing (WAJC); and at Spiggie, Shetland, on the 23rd (ATM). A pair of **Collared Doves** in a larch tree and a third bird cooing on a nearby television aerial on 12th July in Nairn are the first certainly recorded in the county (MFMM), although a pair of doves which had a nest of young blown down in September 1961 in this area and were heard again the following summer were almost certainly Collared Doves (RW). Two on 15th September in Cambuslang are the first recorded in Lanarkshire, though these are said to have been about Wellshot Drive for a year or so (HB). On Islay (see *antea* 2: 439) two definite Collared Doves were seen at Gruinart Post Office on 1st June with a nest, from which at least one chick fledged; local information is that by August there were up to eight with the hens (HK, AT); an adult and two juveniles were seen at the same place on 7th/10th June (JM, RTS, JGY, JY). At Stornoway six in the middle of the town were being fed daily from the middle of June (WAJC).

27th August was a late date for an adult **Cuckoo** at Glenforsa, Mull (THB); a Cuckoo was seen also at Banchory, Kincardineshire, on 15th September (DJ). Another Dumfriesshire locality for **Green Woodpeckers** is Dormont, Lockerbie, where odd birds have been seen since 1952 and a nest was found this year (WNC). On the northern fringe of the range one was heard loud and clear on 10th and 11th June at Dunkeld, North Perthshire (AGSB); and one, perhaps two, were seen near Aberfoyle on 17th August in Loch Ard Forest, South Perthshire/West Stirlingshire border (AFP).

A pair of **Swallows** on Coll had a nest under a bridge at Clabhach on 9th July; this is the first proof of breeding on the island (see *Brit. Birds* 51: 105) (CT). A distinct westward coasting movement of Swallows was noted on 22nd August between 0630 and 0845 hrs from Aberlady to Cockenzie, East Lothian, at the rate of about 100 per hour (DIMW).

Another East Lothian **Magpie** was in Gifford Woods on 21st September (A-MS). A **Chough** on a Barra hillside on 10th August feeding with two Hooded Crows was probably a migrant as a local crofter who had noticed it for the previous few days had never seen one before, though the local cliffs appear suitable for breeding (WAC).

A large autumn flock of well over 200 **Mistle Thrushes** was scattered over half a square mile near Hawick in the late afternoon of 11th August; normally parties of 10/15 are seen there at this season; the birds seemed to be drifting southwards; none bred locally this year after being driven out by the cold winter (WSM). A single **Redwing**, evidently an injured bird as it would not readily take flight, was regularly seen in the Royal Botanic Garden, Edinburgh, from April; possibly two were present throughout the summer because a strong-flying bird was seen on 27th August, and both of them together on 17th September and subsequently (JHS). Concentrations of **Ring Ouzels** in the Moorfoots, Midlothian, were recorded in September with 40 and 30 in Moss Cleuch and Wolf Cleuch respectively on the 15th, and 8 and 24 on the 29th (WB). Twenty **Whinchats** in a field at Robroyston, Glasgow, on 16th July is an unusual number for the area (BZ); large counts were made also near Bothkennar, Stirlingshire, in August and September, with a maximum of 29 on 17th August (GD, JP).

A **Garden Warbler** at Kinlochewe on 8th June is the first record for West Ross (CGC). At Stornoway one was heard on various dates (WAJC), and was singing strongly from thick cover on 5th/8th June, when adequate views were eventually obtained; it is a rare bird in the Outer Hebrides (NE). A **Chiffchaff** in West Ross was noted at Inverpolly on 8th June (CGC).

A **Spotted Flycatcher** at Acha, on Coll, on 6th July, was the second record for the island (see *Brit. Birds* 51: 109) (CT). In central Edinburgh there were two in Queen Street gardens on 19th August (DIMW). A cock **Pied Flycatcher** at Buchanan

Castle, Drymen, on 30th July seems to be the first record of the species in West Stirlingshire (MFMM).

A pair of *flavissima* **Yellow Wagtails** had four nestlings at Hilda Marshes, Glasgow, on 6th July; a cock bird of the *flava* type was also seen that day after several weeks absence; this must be the last year this site can be used by these birds (see *antea* 2: 212, 443) (WW, BZ). Other reports of "Yellow" Wagtails are of two adults and two juveniles near Ayr on 1st August (MEC, RMR); 15 at Hamilton Low Parks on 15th August (RMR); single birds on various dates in August and September at Skinflats, Stirlingshire, and six—two adults and four juveniles—on 4th August (GD, JP); and four at Caerlaverock on 27th August (ELR).

A **Hawfinch** was seen at Blackshade, Dundee, on 7th July (CMM). In Edinburgh Royal Botanic Garden, where Hawfinches have been recorded quite often since 1947, four flew over calling on 12th July, one on the 19th, and two on the 23rd (JHS). A pair of **Siskins** at Kilmacolm, Renfrewshire, in early June may have nested, but this was not proved; the species is not a regular breeding bird in the county (DMacR). A cock **Twite** was at the Doonfoot, Ayr, on 2nd August (RMR).

All records of **Crossbills** in Scotland during winter 1962/63 have been passed to K. Williamson for his paper on the invasion, being published in *Bird Migration*. Another invasion is now with us, and the following reports have come in:

Fair Isle—only odd birds until 13th July when there were 34; larger arrivals in August (PED).
Stornoway—1 on 30th Sept (NE).
Colonsay—party of 15/20 on 15th Aug (GLS).
Glenforsa Woods, Mull—party of 15 from 25th to 29th Aug (THB).
Wolf Cleuch, Dewar Burn, Midlothian—female on 15th Sept (WB).

A **Snow Bunting** was at Bridgend, Islay, on the unusual date of 7th June (JM, RTS, JGY, JY).

Observers in Lanarkshire mention flocks of 18 **Tree Sparrows** near Gadloch, an area where small numbers breed, on 29th Sept (WW, BZ);and between 100 and 200 scattered in clumps of trees and bushes at Hamilton on 8th August (TDHM).

Earlier observations—before 1st June 1963

An **Osprey** was seen catching a fish at Dinnet, Aberdeenshire, on 23rd May (NP).

On the Dunbartonshire bank of the mouth of the Endrick 60 **Black-tailed Godwits** were seen on 27th April to add to other records of numbers in spring (*antea* 2: 436); though regular there in spring and autumn ten is the usual maximum; they were gone next day (DS).

In the summer number it was suggested that 400 **Knot** at Girvan on 3rd February were unusually many for Clyde (*antea* 2: 379). This is evidently not so. One observer has seen 400/500 on the Barassie and Newton on Ayr shores often in the past four years, and following a reliable report of some 2000/2500 at Barassie at the end of March 1963 he counted 1000 ± 50 on 3rd April (GAR); another observer reports that up to 1000 Knot has not been an unusual count on the Barassie shore in recent winters, and sensational numbers on 27th January, about the time of the observation giving rise to these comments, were estimated at between 7000 and 8000 (LAU).

On 7th April a **Scandinavian Lesser Black-backed Gull** was seen at Auldgirth, Dumfriesshire, with a British bird; this is apparently only the second published record of this race in the county (see *antea* 2: 317) (JGY). April movements of **Common Gulls** over Invergowrie included 130 passing NE at 1800 hrs on the 8th, and smaller numbers until the 25th (HB).

In addition to the **Turtle Doves** away from their breeding localities in early June (*antea* 2: 438), one remained from 12th to 15th May in a strip of deciduous wood at the edge of a fir plantation on the south slope of Tinto Hill, Lanarkshire (DBK). A **Collared Dove** seen at Fort William on 18th May is the first record of the species for South Inverness-shire and Argyll Faunal Area (CGC).

A **Jay** in Blackhall forest on 22nd April was a rare bird for North Kincardineshire (see *antea* 2: 194) (NP).

There was a **Chiffchaff** at Invermoriston, Inverness-shire, on 11th May (CGC).

A **Great Grey Shrike**, first seen early in November 1962, spent the whole winter about a mile west of Aboyne, Aberdeenshire, and was noted regularly until the end of March, even in the severe weather (AW); another was seen near Forest Lodge, Boat of Garten, Inverness-shire, on 9th April (HAF).

General observations on behaviour and plumage

Two observers have further comments on the apparently legless gulls (*antea* 2: 384). Many were noticed on a crossing to South Uist on 1st July accompanying the boat, but on close inspection it was seen that instead of putting their legs back under the tail, they were in fact tucking them forward into their breast feathers (TDHM). The other observer was caught by this "leg-pull" in 1950 and started a correspondence about it in *The Field*. The phenomenon had however been photographed and commented upon by John Barlee (*Birds on the Wing*, 1947), who demonstrated that the legs were not hidden in the tail coverts but held forward and tucked away beneath the belly feathers (LAU). Further comments have been published recently on this subject by L. P. Alder (*Brit. Birds* 56: 219).

A **Black Guillemot** timed diving off Handa, Sutherland, early in September remained submerged for from 32 to 55 seconds, the average of 16 dives being about 40 seconds (HAF).

Woodpigeons have recently been reported nesting in the marram grass at Forvie, Aberdeenshire (*Brit. Birds* 56: 340); in the same area a second nest was found on the ground on 2nd June, but it was later deserted (NP).

At Dunbog, North Fife, five pairs of **Starlings** were feeding second broods early in July, after successfully rearing their first broods; in previous years only one possible instance of a second brood has been suspected there (TS).

On 29th July and early in August at Kinnaird Castle, Brechin, Angus, a normally plumaged pair of **Bullfinches** was seen feeding two white fledglings; one was pure white, but the other had a few light grey feathers on the upper back; the colour of the eyes was not seen (GMC, JD).

Correction

The **Corncrake** calling on 15th June (*antea* 2: 436) was at Collin, Dumfriesshire, not Collin, Kirkcudbrightshire.

OBITUARIES

ELIZABETH A. GARDEN

(Plate 26)

Miss Elizabeth Ann Garden, Betty to her many friends, died at her home in Newburgh on 2nd September 1963. She had been seriously ill for several months and her courage, selflessness and cheerfulness during those distressing weeks will be remembered with admiration by all those (and there were many) who visited her. Ornithological circles in Scotland and further afield will find it very difficult to fill the unexpectedly large gap now in their ranks: unexpected because Betty Garden was involved in far more organisations and projects than her self-effacing manner suggested.

Although the family belonged to Aberdeen, she was born in Brighton on 29th May 1918 and returned with her parents to Aberdeen when only a few months old; eventually the family moved to Foucausie near Grandhome on the lower Don. She was educated at St Margaret's School, Aberdeen, and St Leonard's in St Andrews. After school she spent some months in eastern Canada, before returning to Foucausie. During the war she spent some years with the Forestry Commission in charge of a large number of girls, mainly in upper Donside, and in 1946 she was seconded to the Control Commission and worked for two years in Germany in connection with their reafforestation plans. During this time she saw much of western Europe. In 1948 she returned home and spent two more years with the Forestry Commission before returning to Foucausie to help nurse her father in his long fatal illness. Early in 1957 she moved to Newburgh so that she could carry out more intensive observations on the birds of the Ythan estuary. She lived in lodgings until 1959, and then moved into her own house in which so many ornithologists were to gather and enjoy her generous hospitality.

Betty Garden was interested in the outdoors even as a little girl. Her father was an enthusiastic climber, angler and bird watcher, and she owed her great love of the first and the last to his influence. She was an active climber and member of the Cairngorm Club for many years but ceased this activity after witnessing a distressing accident in the snow-clad summits of the Cairngorms. Her interest in birds flourished, and indeed for the last ten years or so her life was devoted to their study. Her activities went far beyond simple bird watching. In 1958 she analysed and published a survey of heronries in Scotland, and her work, along with Dr C. Rayski, on parasites and disease of Eiders was published in *Nature* and in the Wildfowl Trust *Annual Report*. However, it is perhaps not by her work in the field of original research that she will be best remembered, but for her activities in coordinating and analysing the data from cooperative enquiries, such as the Heron Census, the Mute Swan Enquiry and the National Wildfowl Counts for which she was the Scottish Recorder. Her association with the Wildfowl Trust was one of the most productive from her point of view. Recently she had begun trapping diving ducks on the Ythan estuary, and in the last months of 1962 was obtaining useful catches of Scaup, Goldeneye and Tufted Ducks—species notoriously difficult to catch. One of the Tufted Ducks caught in the Ythan had been ringed in Finland, and was subsequently recaptured on Finnish breeding grounds in spring 1963. This remarkable double recovery gave her a great deal of pleasure.

Betty was a keen member of the S.O.C. of which she was the Branch Secretary in Aberdeen; she was an enthusiast at the R.S.P.B. Osprey camps where her culinary efforts were always popular; she was the local representative of the B.T.O. and a member of the Wildfowl Trust. Her interest in birds took her beyond the confines of this country to Faroe, Iceland, the Everglades in Florida and to Sweden, but it brought her also to the Ythan estuary. There she built Eider Cottage, with a wonderful view of the estuary and the Foveran Burn. From its picture window she identified over 100 species of birds, and the fine view comforted her during her illness. It was

Betty's wish to ensure that all her projects should be carried on, and several people are now continuing where she left off. Past and future results will be due very largely to her unstinted efforts.

G. M. DUNNET.

IAN R. DOWNHILL

The sad news that Ian Downhill had gone missing while bird watching on Island Roan in Sutherland will have shocked his many friends north of the border.

A Yorkshireman, Ian first joined the S.O.C. when he came to Edinburgh to study at the Royal Dick Veterinary College in 1960 after a season as assistant warden at Skokholm Bird Observatory. But it came as no surprise when, after a successful first year at university, he decided to change to the science faculty and study zoology. Both at university and in the S.O.C., meetings of which he attended regularly, he came to be widely respected for his quiet enthusiasm and extensive knowledge.

His interest in birds stemmed from a love of the wilds, and when he first visited Sutherland in 1959 he had found an ideal niche for himself. He returned there for much of each summer vacation in subsequent years and, being an indefatigable fieldworker, he quickly built up a considerable knowledge of the birds of that county. Perhaps his greatest find, and that in which he took most pleasure, was the first pair of Wood Sandpipers to breed in Scotland—indeed he was also responsible for their discovery at a second location. In the last two years his interest had centred on Island Roan, off the Kyle of Tongue, and his important finds there have received justified publicity in this journal.

Our sympathies must go to his parents with the knowledge that we share the burden of a great loss.

P. J. B. SLATER.

CORRECTIONS

A check-list of the birds of Tentsmuir, Fife:

p. 125 l. 22—for "about 1919" read "about 1910."
p. 125 l. 25—for "by 1910" read "by 1919."
p. 127 l. 39—for "nesting terns" read "nestling terns."

OFFICIAL SECTION

THE SCOTTISH ORNITHOLOGISTS' CLUB

Balance Sheet as at 31st August 1963

		As at 31/8/63	As at 31/8/62
Accumulated Surplus :			
As at 31st August 1962		£1020 5 2	£1003
Add : Library Fund Balance written back		14 2 5	31
"Scottish Birds" Account written back		30 17 10	—
Provisions written back		120 0 0	—
		£1185 5 5	1034
Add : Excess of Income over Expenditure for year		351 10 4	151
		£1536 15 9	£1185
Made up of :			
Cash—In hands of Secretary		£10 0 0	£10
In Royal Bank of Scotland		158 0 3	102
In do. No. 2 A/c.		100 0 0	—
In Edinburgh Savings Bank		415 7 3	128
		683 7 6	240
Book Shop Stock at cost		154 3 10	—
Debt due to Club		4 0 0	9
		841 11 4	249
5% Defence Bonds		500 0 0	500
Loan to Renfrew County Council at 6¼% repayable 1965		500 0 0	500
		1841 11 4	1249
Less :			
Subscriptions paid in advance	£72 17 6		64
Donation from the late Miss E. A. Garden—not yet expended	60 0 0		—
Debts due by Club	171 18 1		—
		304 15 7	
		£1536 15 9	£1185
Endowments—the free annual income of which is available for the advancement of ornithology:			
Miss L. J. Rintoul		£1000 0 0	£1000
Miss E. V. Baxter		1000 0 0	1000
		£2000 0 0	£2000
Invested in :			
£1151 3½% War Stock at cost		£1000 0 0	£1000
976 Units The Equities Investment Fund for Charities at cost		1000 0 0	1000
		£2000 0 0	£2000

Revenue Account for the year ended 31st August 1963

	Year to 31/8/63			Year to 31/8/62
INCOME—				
Subscriptions received for year	£1359	7	9	£1185
Income Tax recovered on Covenanted Subscriptions	133	7	11	112
Dividends and Interest received	141	16	7	131
Surplus on Book Shop (Sales £534)	154	18	10	56
Sales of "Scottish Birds" to non-members	71	19	3	84
Sundry Sales	75	14	6	36
Special Income:				
Donations	20	17	0	—
Surplus on Usher Hall Lecture	55	16	3	—
	£2013	18	1	£1604
EXPENDITURE—				
Branch Expenses including Lectures	£189	4	9	£135
Secretarial Services	530	1	11	457
Office Expenses	223	12	2	204
Scottish Centre for Ornithology and Bird Protection: Club's Share of Running Expenses (including £50 contribution to House Fabric Fund)	205	17	5	135
Cost of Books Purchased for Library	122	11	5	111
Cost of Publishing "Scottish Birds" (less advertising revenue £173, 3/7)	340	6	5	354
Net Cost of Annual Conference	31	11	0	9
Subscriptions paid	5	2	0	5
Sundry Purchases	14	0	8	43
	£1662	7	9	£1453
Excess of Income over Expenditure carried to Balance Sheet	351	10	4	151
	£2013	18	1	£1604

House Fabric Fund—Summary of Accounts for year ended 31st August 1963

	Year to 31/8/63			Year to 31/8/62
RECEIPTS—				
Balance as at 31st August 1962	£86	6	8	£72
Year's Rent from Royal Society for the Protection of Birds	100	0	0	100
Year's Rent from Mr and Mrs George Waterston	100	0	0	100
Annual Contribution from S.O.C. Revenue Account	50	0	0	50
Donation in memory of James and Catherine Harvey—for new lending library	200	0	0	—
Miscellaneous interests	3	15	3	3
	£540	1	11	£325

EXPENDITURE—

Repairs and maintenance (including cost of painting staircase—£78)		£103 1 5	£93
Property Burdens		140 1 0	135
Insurance		10 4 11	10
		253 7 4	238
On Deposit with Dunedin Building Society	£272 10 4		
At credit of account with Fraser, Stodart & Ballingall, W.S.	14 4 3	286 14 7	86
		£540 1 11	£424

EDINBURGH, 15th October, 1963.—I have audited the foregoing revenue accounts for the year to 31st August 1963 and the Balance Sheet as at that date. I have accepted as correct the subscriptions shown as received in the Books and certify that in my opinion the foregoing accounts are correctly stated and sufficiently vouched.

(Signed) ARTHUR WALKER,
Chartered Accountant.

REPORT OF COUNCIL

The Council has the honour to submit the following Report for the past year:

Membership. The membership of the Club has again showed a satisfactory increase during the session, reaching a total of 1261. 279 new members were enrolled, while 121 resigned or failed to renew their subscriptions. Joint membership subscriptions rose from 60 to 75. Comparative figures are shown in the following tables:

	31/8/59	31/8/60	31/8/61	31/8/62	31/8/63
Ordinary	747	781	852	918	1062
Junior	140	141	177	181	195
Honorary	7	5	6	4	4
	894	927	1035	1103	1261

Deeds of Covenant. Deeds of Covenant signed by members for their subscriptions increased from 130 to 175 during the Session. The Council wishes to thank members who signed new Covenants and thereby enabled the general funds of the Club to benefit by a total of £134, and to commend this method of subscribing to all those who pay income tax at the full rate.

Council Meetings. The Council met five times during the Session.

General Meetings. A full programme of lectures was carried out during the winter in seven Branches. The Council wishes to thank the lecturers who gave so freely of their services, the Branch Secretaries for their arrangements, and all who gave hospitality.

New Groups. Two new Groups of the Club were formed during the summer in Thurso and Inverness. Owing to the small number of members in these areas the Council decided to affiliate them to the Club as Groups under the aims expressed in item (2) (b) of the Constitution, and it was hoped that when the numbers had increased sufficiently full Branch status with representation on the Council could be given. Already a number of new members have been enrolled in both areas as a result, and the Council extends its good wishes for the success of both Groups.

Ayr Branch. The new Branch in Ayr completed its first session very successfully with a considerable increase in local membership.

Excursions. In addition to local excursions arranged by the Branches during the summer, the Club also organised weekend excursions to Dumfries in February and to Aviemore in May, both of which were well attended.

Annual Conference. The Annual Conference and Annual Dinner were held in Dunblane in October with an attendance of over 200 members and guests. The official guests of the Club were Dr K. H. Voous, Amsterdam, and Dr Robert Carrick, Canberra, who both gave papers, and Heinz Sielmann, Munich, who showed his films on the Galapagos Islands.

Public Lecture. A public lecture was arranged in the Usher Hall, Edinburgh, on the day after the Annual Conference to enable a wider audience to hear Heinz Sielmann and to see his film. This lecture was well attended and the profit of £56 was applied to the general funds of the Club.

Northern Conference. A special weekend Conference for members living in the north of Scotland was held in Inverness from 30th November to 2nd December with an attendance of about 40 members and guests. Papers were given by Dr G. M. Dunnet and Harry Milne, Culterty Research Station; Dr D. H. Mills, Salmon Research Laboratory, Contin; David Wilson, Secretary of the B.T.O.; Roy Dennis; Dr I. D. Pennie; and Dr W. J. Eggeling, Nature Conservancy; and much useful discussion was held.

"Scottish Birds." Four numbers of the journal were published during the session and the Council wishes to congratulate the Editor, A. T. Macmillan, on the very high standard maintained in each number. In addition to Libraries in Britain, the journal is now sent by subscription or exchange to Libraries and Societies in Australia and New Zealand, U.S.A. and Canada, France, Belgium, Holland, Germany, Poland, Estonia, Finland, Norway, Sweden, Denmark, and Iceland.

In the autumn the Council accepted with great regret the resignation of Arthur Smith as Business Editor of "Scottish Birds" owing to increased pressure of work in his own business, and wish to record their gratitude to him for the immense amount of work he has done, both in the initial launching of the journal and in the subsequent production. Dr T. C. Smout has been appointed in his place.

Scottish Bird Records Committee. The Committee met once during the session under the chairmanship of D. G. Andrew; the Review for 1962 was published in "Scottish Birds" (2: 342-350).

Club Library. A number of books and journals has been presented to the Library during the year, and the Council records its sincere thanks to all the donors. It was agreed by the Council that a maximum sum of £120 should be allocated to the Library Fund for the purchase of books during the session. Among important purchases made was a complete set of the Transactions of the Berwickshire Naturalists' Club, and Alpheraky's "Geese of Europe and Asia." A gift of £60 from the late Miss Betty Garden was received for the purchase of a glass-fronted bookcase for the more valuable books in the Library. As a result of a donation of £200 in memory of James and Catherine Harvey, the Council was able to recondition and furnish a room in the Scottish Centre for use as a Lending Library. This room is now complete and provides ample space for the books as well as helping to relieve pressure of space in the Reference Library.

Bookshop. The Club has received official sanction from the Publishers Association to operate a Bird Bookshop in the Scottish Centre. The

Club can now purchase all books at full trade discount and sell them to members at the usual retail price. As it was expected that there would be a considerable increase in revenue from this source, the Council agreed that these profits should in future be applied to the general funds of the Club and not to the Library Fund as formerly. During the summer, stocks of new books were built up in preparation for wider advertising in the new session, and a considerable number of books were sold bringing in a profit of approximately £154 for the year. A stock of over 100 titles is held at present in the bookshop—the largest range of bird books in any shop in Scotland—and the Council commends this new venture to members of the Club for their support. It hopes that this will not only be a useful service to members but will also increase the revenue and enable more developments to be made. All books are supplied post free.

Scottish Centre for Ornithology and Bird Protection. Ornithologists from all parts of the world have again visited the Centre to obtain information on bird watching facilities. On 25th July a group of American ornithologists led by Mr Orville Crowder was entertained to a reception and film by members of Council and of the Edinburgh Branch Committee. The offices and Club room were open to the public during National Nature Week from 17th to 24th June. The main Club room and Library has been redecorated during the summer.

Certain changes occurred in the officers of the Club during the year. The Council received with regret the resignation of Robert Hillcoat as Hon. Treasurer of the Club, and records its gratitude to him for his services. Maxwell Hamilton, C.A. was appointed in his place. In February Mrs R. Smillie was appointed as a part-time secretarial assistant to Mrs Waterston. The Council also records its sincere thanks to Mrs John Hyatt who gave a great deal of her time and energy in a voluntary capacity over many months to re-cataloguing the Reference Library.

For the Council, M. F. M. MEIKLEJOHN, President.

TWENTY-SEVENTH ANNUAL GENERAL MEETING

The Twenty-seventh Annual General Meeting of the Club was held in the Hotel Dunblane, Perthshire, on Saturday 26th October 1963, at 6.15 p.m. Professor M. F. M. Meiklejohn, President of the Club, presided over an attendance of about seventy-five members.

Apologies. Apologies for absence were received from Dr David Boddington, D. M. Stark and Dr Adam Watson.

Minutes. The Minutes of the twenty-sixth Annual General Meeting, held in Dunblane on 27th October 1962, were approved and signed.

Report of Council. The Chairman presented the Report of Council for the past year. He stressed the steady increase in Club membership over the past five years, and the importance to the Club of income obtained both through Deeds of Covenant signed by members for their subscriptions, and from the new Club Bookshop, and urged members to give these their support. The Report was adopted.

Miss E. A. Garden and Ian R. Downhill. The Chairman announced with great regret the deaths of Miss E. A. Garden, Secretary of the Aberdeen Branch and member of Council for many years, and Ian R. Downhill, Zoology student at Edinburgh University, who was lost on Island Roan, Sutherland, in September.

Accounts. The Accounts for the past Session, presented by the Hon. Treasurer, were approved.

Election of Auditor. Arthur Walker C.A. was re-elected Auditor for the ensuing session.

Election of new Office-Bearers. In the absence of any other nominations, the Council's recommendation for the election of new Office-Bearers was approved, as follows: President, Dr I. D. Pennie to replace Professor M. F. M. Meiklejohn who had completed his term of office; Vice-President, Dr W. J. Eggeling, to replace Dr I. D. Pennie; Council, J. H. B. Munro and Dr D. H. Mills to replace A. G. S. Bryson and Lt. Col. J. P. Grant who were due to retire by rotation; G. L. A. Patrick to replace G. H. Acklam who had gone abroad; C. K. Mylne to replace Dr Eggeling, and A. J. Smith to replace A. T. Macmillan, who as Editor of the Journal was now an ex officio member of Council. The appointment of M. K. Hamilton as Hon. Treasurer was also confirmed. The Chairman thanked the retiring members for their services to the Club.

Amendment to Constitution. The following amendment to the Constitution of the Club was approved, under 4 (h) Financial Year: "The financial year of the Club shall end on 30th June."

National Heron Census. The Chairman announced that the Council would make an appointment shortly of a Scottish organiser for the B.T.O. National Census of Heronries in 1964.

Votes of Thanks. The Chairman moved a warm vote of thanks to all the members who were assisting at the Conference in the Registration Office, the projectionists, excursion leaders and exhibiters. The meeting closed with a hearty vote of thanks to the Chairman on the motion of Dr I. D. Pennie, President-elect of the Club.

COUNCIL AND OFFICE-BEARERS OF THE CLUB FOR SESSION 27

Hon Presidents : Dr D. A. Bannerman, O.B.E.; Sir Charles G. Connell; Rev. J. M. McWilliam.

President : Dr I. D. Pennie.

Vice-President : Dr W. J. Eggeling.

Hon. Treasurer : Maxwell K. Hamilton, C.A.

Hon. Treasurer of House Fabric Fund : D. G. Andrew.

Secretary and Treasurer : Mrs George Waterston.

Editor of "Scottish Birds": A. T. Macmillan.

Assistant Editors of "Scottish Birds": D. G. Andrew; Dr T. C. Smout.

Business Editor of Scottish Birds": Dr T. C. Smout.

Council : Dr J. W. Campbell; Dr G. M. Dunnet; Alastair Macdonald; Dr D. H. Mills; J. H. B. Munro; C. K. Mylne; G. L. A. Patrick; A. J. Smith; George Waterston; A. D. Watson.

Branch Representatives to Council : William Austin (Dumfries); Mrs L. S. Barrus (Aberdeen); Miss M. H. E. Cuninghame (St Andrews); C. E. Palmar (Glasgow); Mrs A. E. S. Scorgie (Ayr); J. Hunter Sutherland (Dundee); Miss Olive Thompson (Edinburgh).

BRANCH AND GROUP OFFICE-BEARERS

Aberdeen : Chairman, Professor V. C. Wynne-Edwards; Vice-Chairman, A. Anderson; Secretary, Mrs L. S. Barrus; Committee, Dr G. M. Dunnet, D. W. Garvie, Miss F. J. Greig.

Ayr : Chairman, R. M. Ramage; Vice-Chairman, G. A. Richards; Secretary, Dr M. E. Castle; Committee, S. L. Hunter, Mrs M. E. McGregor, Rev. J. S. Phillip, Mrs A. E. S. Scorgie.

Caithness : Chairman, J. M. Gunn; Secretary, D. M. Stark.

Inverness : Chairman, Dr Maeve Rusk; Vice-Chairman, Dr D. H. Mills; Secretary, James MacGeoch; Committee, not known.

Dumfries : Chairman, Sir Arthur Duncan; Vice-Chairman, William Austin; Secretary, H. M. Russell; Committee, not known.

Dundee : Chairman, J. Hunter Sutherland; Vice-Chairman, J. E. Forrest; Secretary, Jack Scobie; Committee, F. D. Graham, Andrew Shepherd, Miss Jenny Stirling, R. Summers.

Edinburgh : Chairman, A. T. Macmillan; Vice-Chairman, M. K. Hamilton; Secretary, Miss Olive Thompson; Committee, C. N. L. Cowper, C. K. Mylne, Mrs E. F. Paterson, P. J. B. Slater.

Glasgow : Chairman, C. E. Palmar; Vice-Chairman, J. M. S. Arnott; Secretary, G. L. A. Patrick; Committee, Mrs W. U. Flower, Miss M. Mathisen, T. D. H. Merrie, A. L. Ogilvy.

St Andrews : Chairman, Miss J. McFarlane; Vice-Chairman, Miss D. M. Wilson; Secretary, Miss M. M. Spires; Committee, Miss J. V. Black, Miss M. H. E. Cuninghame, Julian Holdroyd.

SCOTTISH BIRD RECORDS COMMITTEE

Chairman : D. G. Andrew.

Committee : A. G. S. Bryson, Dr J. W. Campbell, Sir Arthur Duncan, Dr W. J. Eggeling, A. T. Macmillan, Professor M. F. M. Meiklejohn, Dr I. D. Pennie, Kenneth Williamson, George Waterston, Professor V. C. Wynne-Edwards.

WEEKEND EXCURSION TO DUMFRIES

An excursion has been arranged with the County Hotel, Dumfries, for the weekend 21st to 23rd February 1964, to see the geese on the Solway.

Accommodation: inclusive terms £4. 9. 6d (including 10% service charge) as follows—dinner and bed, Friday 21st; breakfast, packed lunch, dinner and bed on Saturday 22nd; breakfast and packed lunch on Sunday 23rd.

Members may bring guests, and should book direct with the Manager, County Hotel, Dumfries (Tel. 146), notifying him that they are attending the Club excursion. Arrangements for transport by private cars should be made with Branch Secretaries. It is advisable to bring warm clothing, gum boots if possible, and thermos flasks.

AYR BRANCH WINTER EXCURSIONS

The Ayr Branch has arranged a series of local excursions during the coming winter months. Members who are interested and wish to participate should meet promptly at 2 p.m. in Wellington Square, Ayr, on the first Saturday in each month, December to March inclusive. The excursion leader will be present in Wellington Square opposite the County Hotel.

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The index to species is selective, not comprehensive. Titles of papers and short notes dealing with particular species are included in abbreviated form, and some other sub-headings are added; otherwise only page numbers are given. All references have been indexed from short and current notes, reviews of changes in status, local status lists, and lists of unusual occurrences. Since most contributions are concerned with migration and distribution of birds in Scotland it may generally be assumed that where no further details of the references listed under particular species are given they are in this category. Passing and comparative references have usually been omitted, and also references within the body of papers, reviews, obituaries and other contributions, unless these are status reports or considered of special interest apart from the context in which they are mentioned. In particular it should be emphasised that detailed and valuable information on migration and numbers of common birds, in papers such as the Isle of May reports, finds no place in the index to species.

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Species not mentioned in the index are not included here. Except for the order of species within certain genera, scientific nomenclature follows the 1952 B.O.U. *Check-List of the Birds of Great Britain and Ireland* with the changes recommended in 1956 by the Taxonomic Sub-Committee (*Ibis* 98: 158-168), and the 1957 decisions of the International Commission on Zoological Nomenclature (*Ibis* 99: 369). English names follow *The Handbook of British Birds* with the alterations proposed in *British Birds* in January 1953 (46: 2-3) and January 1956 (49: 5).

Gavia immer Great Northern Diver
Gavia adamsii White-billed Diver
Gavia arctica Black-throated Diver
Gavia stellata Red-throated Diver
Podiceps cristatus Great Crested Grebe
Podiceps griseigena Red-necked Grebe
Podiceps auritus Slavonian Grebe
Podiceps nigricollis Black-necked Grebe
Podiceps ruficollis Little Grebe
Oceanodroma leucorrhoa Leach's Petrel
Hydrobates pelagicus Storm Petrel
Procellaria puffinus Manx Shearwater
Procellaria gravis Great Shearwater
Procellaria diomedea Cory's Shearwater
Procellaria grisea Sooty Shearwater
Fulmarus glacialis Fulmar
Sula bassana Gannet
Phalacrocorax carbo Cormorant
Phalacrocorax aristotelis Shag
Pelecanus sp. Pelican
Fregata sp. Frigate Bird
Ardea cinerea Heron
Egretta garzetta Little Egret
Nycticorax nycticorax Night Heron
Botaurus stellaris Bittern
Ciconia ciconia White Stork
Platalea leucorodia Spoonbill
Plegadis falcinellus Glossy Ibis
Anas platyrhynchos Mallard
Anas crecca Teal
Anas crecca carolinensis Green-winged Teal
Anas formosa Baikal Teal
Anas querquedula Garganey
Anas strepera Gadwall
Anas penelope Wigeon
Anas americana Baldpate
Anas acuta Pintail
Spatula clypeata Shoveler
Netta rufina Red-crested Pochard
Aythya collaris Ring-necked Duck
Aythya marila Scaup
Aythya fuligula Tufted Duck
Aythya ferina Pochard
Bucephala clangula Goldeneye
Clangula hyemalis Long-tailed Duck
Melanitta fusca Velvet Scoter
Melanitta perspicillata Surf Scoter
Melanitta nigra Common Scoter
Somateria mollissima Eider
Somateria spectabilis King Eider
Mergus merganser Goosander
Mergus serrator Red-breasted Merganser
Mergus albellus Smew
Tadorna tadorna Shelduck
Casarca ferruginea Ruddy Shelduck
Anser anser Grey Lag Goose
Anser albifrons White-fronted Goose
Anser arvensis arvensis Bean Goose
Anser arvensis brachyrhynchus Pink-footed Goose
Anser caerulescens Snow Goose
Anser rossi Ross's Goose
Branta bernicla Brent Goose
Branta leucopsis Barnacle Goose
Branta canadensis Canada Goose
Cygnus olor Mute Swan
Cygnus cygnus Whooper Swan
Cygnus columbianus Bewick's Swan
Aquila chrysaetos Golden Eagle
Buteo buteo Buzzard
Buteo lagopus Rough-legged Buzzard
Accipiter nisus Sparrowhawk
Accipiter gentilis Goshawk
Milvus milvus Kite
Haliaetus albicilla White-tailed Eagle
Pernis apivorus Honey Buzzard
Circus aeruginosus Marsh Harrier
Circus cyaneus Hen Harrier
Circus pygargus Montagu's Harrier
Pandion haliaetus Osprey
Falco peregrinus Peregrine
Falco rusticolus Gyr Falcon
Falco rusticolus islandus Iceland Falcon
Falco columbarius Merlin
Falco vespertinus Red-footed Falcon
Falco tinnunculus Kestrel
Lagopus lagopus Red Grouse
Lagopus mutus Ptarmigan
Lyrurus tetrix Black Grouse
Tetrao urogallus Capercaillie
Alectoris rufa Red-legged Partridge
Perdix perdix Partridge
Coturnix coturnix Quail
Phasianus colchicus Pheasant
Megalornis grus Crane
Rallus aquaticus Water Rail

Porzana porzana Spotted Crake
Porzana pusilla Baillon's Crake
Porzana parva Little Crake
Crex crex Corncrake
Gallinula chloropus Moorhen
Fulica atra Coot
Haematopus ostralegus Oystercatcher
Vanellus vanellus Lapwing
Charadrius hiaticula Ringed Plover
Charadrius alexandrinus Kentish Plover
Charadrius squatarola Grey Plover
Charadrius apricarius Golden Plover
Charadrius morinellus Dotterel
Arenaria interpres Turnstone
Limnodromus scolopaceus Long-billed Dowitcher
Gallinago gallinago Snipe
Gallinago media Great Snipe
Limnocryptes minimus Jack Snipe
Scolopax rusticola Woodcock
Numenius arquata Curlew
Numenius phaeopus Whimbrel
Limosa limosa Black-tailed Godwit
Limosa lapponica Bar-tailed Godwit
Tringa ochropus Green Sandpiper
Tringa glareola Wood Sandpiper
Tringa hypoleucos Common Sandpiper
Tringa totanus Redshank
Tringa erythropus Spotted Redshank
Tringa nebularia Greenshank
Calidris canutus Knot
Calidris maritima Purple Sandpiper
Calidris minuta Little Stint
Calidris melanotos Pectoral Sandpiper
Calidris alpina Dunlin
Calidris testacea Curlew Sandpiper
Calidris pusilla Semipalmated Sandpiper
Calidris mauri Western Sandpiper
Crocethia alba Sanderling
Tryngites subruficollis Buff-breasted Sandpiper
Limicola falcinellus Broad-billed Sandpiper
Philomachus pugnax Ruff
Phalaropus fulicarius Grey Phalarope
Phalaropus lobatus Red-necked Phalarope
Phalaropus tricolor Wilson's Phalarope
Catharacta skua Great Skua
Stercorarius pomarinus Pomarine Skua
Stercorarius parasiticus Arctic Skua
Stercorarius longicaudus Long-tailed Skua
Pagophila eburnea Ivory Gull
Larus marinus Great Black-backed Gull
Larus fuscus Lesser Black-backed Gull
Larus argentatus Herring Gull
Larus canus Common Gull
Larus hyperboreus Glaucous Gull
Larus glaucoides Iceland Gull
Larus melanocephalus Mediterranean Black-headed Gull
Larus minutus Little Gull
Larus ridibundus Black-headed Gull
Xema sabini Sabine's Gull
Rissa tridactyla Kittiwake
Chlidonias niger Black Tern
Sterna hirundo Common Tern
Sterna macrura Arctic Tern
Sterna dougallii Roseate Tern
Sterna albifrons Little Tern
Sterna sandvicensis Sandwich Tern
Alca torda Razorbill
Plautus alle Little Auk
Uria aalge Guillemot
Cepphus grylle Black Guillemot
Fratercula arctica Puffin
Syrrhaptes paradoxus Pallas's Sandgrouse
Columba oenas Stock Dove
Columba livia Rock Dove
Columba palumbus Woodpigeon
Streptopelia turtur Turtle Dove
Streptopelia decaocto Collared Dove
Cuculus canorus Cuckoo
Tyto alba Barn Owl
Nyctea scandiaca Snowy Owl
Athene noctua Little Owl
Strix aluco Tawny Owl
Asio otus Long-eared Owl
Asio flammeus Short-eared Owl
Aegolius funereus Tengmalm's Owl
Caprimulgus europaeus Nightjar
Apus apus Swift
Apus melba Alpine Swift
Alcedo atthis Kingfisher
Upupa epops Hoopoe
Picus viridis Green Woodpecker
Dendrocopos major Great Spotted Woodpecker
Jynx torquilla Wryneck
Melanocorypha leucoptera White-winged Lark
Alauda arvensis Skylark
Eremophila alpestris Shore Lark
Hirundo rustica Swallow
Delichon urbica House Martin
Riparia riparia Sand Martin
Corvus corax Raven
Corvus corone corone Carrion Crow
Corvus corone cornix Hooded Crow
Corvus frugilegus Rook
Corvus monedula Jackdaw
Pica pica Magpie
Garrulus glandarius Jay
Pyrrhocorax pyrrhocorax Chough
Parus major Great Tit
Parus caeruleus Blue Tit
Parus ater Coal Tit
Parus cristatus Crested Tit

Parus montanus Willow Tit
Aegithalos caudatus Long-tailed Tit
Certhia familiaris Treecreeper
Troglodytes troglodytes Wren
Cinclus cinclus Dipper
Turdus viscivorus Mistle Thrush
Turdus pilaris Fieldfare
Turdus philomelos Song Thrush
Turdus musicus Redwing
Turdus eunomus Dusky Thrush
Turdus torquatus Ring Ouzel
Turdus merula Blackbird
Turdus migratorius American Robin
Monticola saxatilis Rockthrush
Oenanthe oenanthe Wheatear
Oenanthe oenanthe leucorrhoa "Greenland" Wheatear
Saxicola torquata Stonechat
Saxicola rubetra Whinchat
Phoenicurus phoenicurus Redstart
Phoenicurus ochruros Black Redstart
Luscinia megarhynchos Nightingale
Cyanosylvia svecica Bluethroat
Erithacus rubecula Robin
Locustella naevia Grasshopper Warbler
Locustella fluviatilis River Warbler
Acrocephalus scirpaceus Reed Warbler
Acrocephalus palustris Marsh Warbler
Acrocephalus schoenobaenus Sedge Warbler
Sylvia atricapilla Blackcap
Sylvia nisoria Barred Warbler
Sylvia borin Garden Warbler
Sylvia communis Whitethroat
Sylvia curruca Lesser Whitethroat
Phylloscopus trochilus Willow Warbler
Phylloscopus collybita Chiffchaff
Phylloscopus sibilatrix Wood Warbler
Phylloscopus bonelli Bonelli's Warbler
Phylloscopus borealis Arctic Warbler
Phylloscopus inornatus Yellow-browed Warbler
Phylloscopus fuscatus Dusky Warbler
Phylloscopus schwarzi Radde's (Bush) Warbler
Regulus regulus Goldcrest
Muscicapa striata Spotted Flycatcher
Muscicapa hypoleuca Pied Flycatcher
Muscicapa albicollis Collared Flycatcher
Muscicapa parva Red-breasted Flycatcher
Prunella modularis Hedge Sparrow or Dunnock
Anthus campestris Tawny Pipit
Anthus trivialis Tree Pipit
Anthus pratensis Meadow Pipit
Anthus cervinus Red-throated Pipit
Anthus spinoletta Rock Pipit
Motacilla alba yarrelli Pied Wagtail
Motacilla alba alba White Wagtail
Motacilla cinerea Grey Wagtail
Motacilla flava "Yellow" Wagtails
Motacilla flava flava Blue-headed Wagtail
Motacilla flava thunbergi Grey-headed Wagtail
Bombycilla garrulus Waxwing
Lanius excubitor Great Grey Shrike
Lanius minor Lesser Grey Shrike
Lanius cristatus collurio Red-backed Shrike
Sturnus vulgaris Starling
Sturnus roseus Rose-coloured Starling
Coccothraustes coccothraustes Hawfinch
Chloris chloris Greenfinch
Carduelis carduelis Goldfinch
Carduelis spinus Siskin
Carduelis cannabina Linnet
Carduelis flavirostris Twite
Carduelis flammea Redpoll
Carduelis flammea disruptis Lesser Redpoll
Carduelis flammea flammea Mealy Redpoll
Carduelis flammea rostrata Greenland Redpoll
Carduelis hornemanni Arctic Redpoll
Carduelis hornemanni hornemanni Hornemann's Redpoll
Pyrrhula pyrrhula Bullfinch
Loxia curvirostra Crossbill (*N.B.* Some notes on "Crossbills" may refer to Scottish and Parrot Crossbills).
Loxia pityopsittacus Parrot Crossbill
Loxia pityopsittacus scotica Scottish Crossbill
Fringilla coelebs Chaffinch
Fringilla montifringilla Brambling
Melospiza melodia Song Sparrow
Emberiza calandra Corn Bunting
Emberiza citrinella Yellowhammer
Emberiza bruniceps Red-headed Bunting
Emberiza aureola Yellow-breasted Bunting
Emberiza hortulana Ortolan Bunting
Emberiza rustica Rustic Bunting
Emberiza schoeniclus Reed Bunting
Calcarius lapponicus Lapland Bunting
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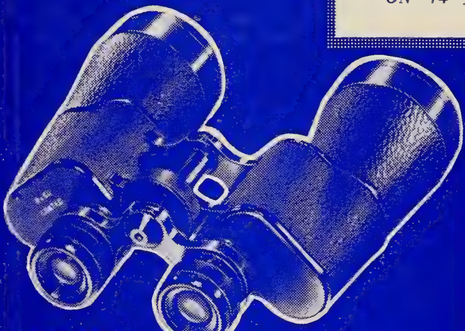

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The Journal of The Scottish Ornithologists' Club

CHECK-LIST OF THE BIRDS OF TENTSMUIR

Vol. 2 *Special Supplement* *Summer 1962*

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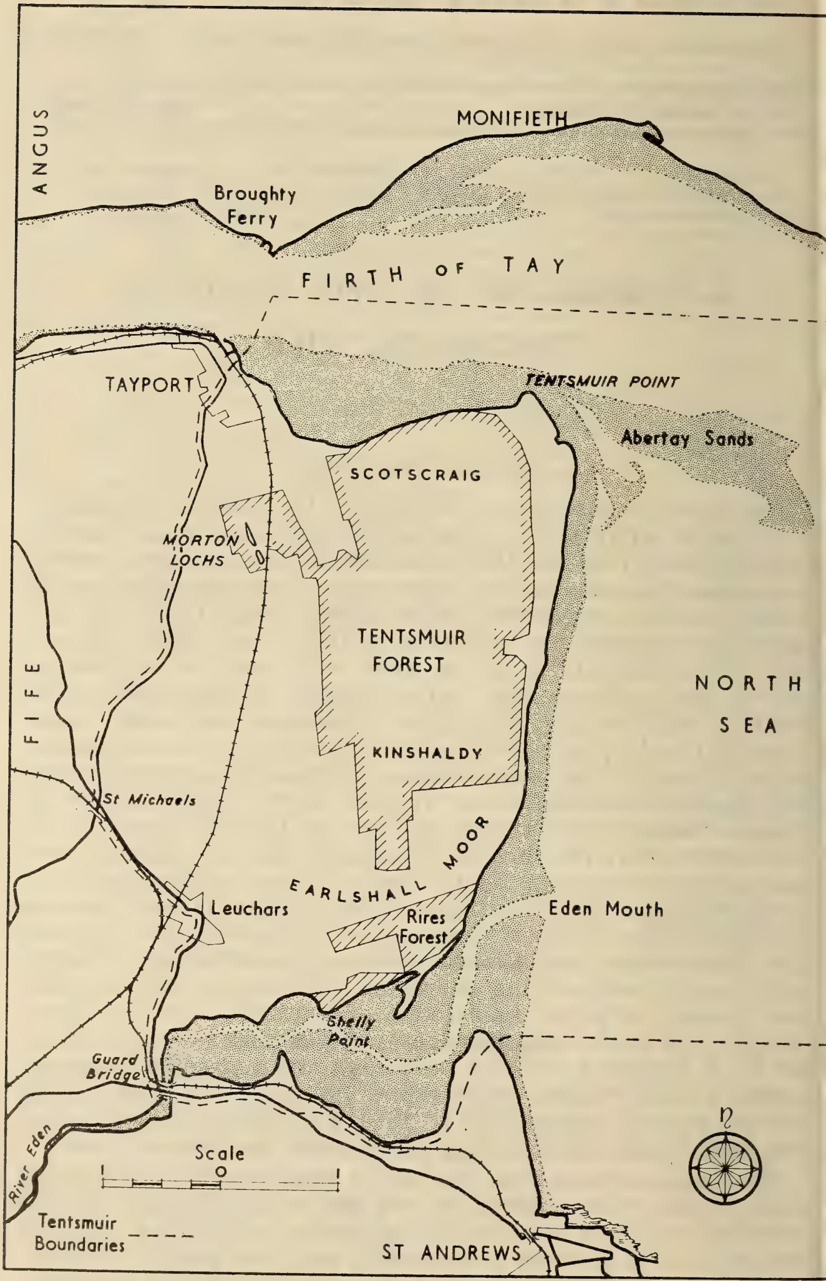
A CHECK-LIST OF THE BIRDS OF TENTSMUIR, FIFE

JACK GRIERSON

Acknowledgments

The main purpose of this account of the birds of Tentsmuir is to place on record a summary of my own notes, mostly made between 1949 and 1956, to which have been added records from other sources. During these years I had the assistance of many people in collecting information about Tentsmuir, especially in making the monthly wildfowl and wader counts. My wife accompanied me on most visits and, in addition to taking part in the counts, helped greatly in determining the nesting populations. Two other observers, Ian Munro and John R. Gordon, gave invaluable assistance by turning out in all weathers for the counts; James Blyth also helped by making simultaneous counts in Tayport Bay. I am indebted to Henry Boase, who allowed me to consult and make use of the information relating to Tentsmuir in his unpublished account of the birds of North Fife, and also to Dr John Berry for providing a list of birds seen there by his father, the late William Berry. Dr Berry also very kindly supplied most of the illustrations used. Robert Skinner, gamekeeper at Earlshall, was a never-ending source of information, and without his friendly help my knowledge of Earlshall and its birds would have been much the poorer. My thanks are also due to Dr W. J. Eggeling who not only read and suggested improvements to the original manuscript, but also supplied many records for the period 1957 to 1960. Publication of this paper has been made possible by a grant from the Baxter Trust.

No claim is made that the list is complete, for an account such as this must contain errors and misstatements, due to insufficient information or wrong assessment of the material available. If it provides a reasonably accurate guide for future workers on Tentsmuir, it will have accomplished its purpose.


ANGUS
MONIFIETH
Broughty Ferry
FIRTH OF TAY
TAYPORT
TENTSMUIR POINT
Abertay Sands
SCOTSCRAIG
MORTON LOCHS
TENTSMUIR FOREST
NORTH SEA
FIFE
KINSHALDY
St Michaels
EARLSHALL MOOR
Leuchars
Rires Forest
Eden Mouth
Shelly Point
Guard Bridge
River Eden
Scale
0
Tentsmuir Boundaries
ST ANDREWS

MAP OF TENTSMUIR.

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1.—THE HABITAT.

Tentsmuir, which forms the north-east corner of Fife, has generally been looked upon as of some importance in the overall picture of birds in Scotland. It is situated at, or near, the junction of two main migration guiding lines, one of which follows the coast southwards, the other turning inland by the Firth of Tay and continuing overland to the upper reaches of the Firth of Forth, thence to the Firth of Clyde, the west coast and Ireland. Bounded to the north and south by the estuaries of the Tay and Eden respectively, the whole east shore faces the North Sea. The western boundary is formed by the road from Tayport to Guardbridge, by way of Leuchars, and in all the area extends to some ten square miles.

In its primitive state the area was a large tract of level, swampy ground, interspersed with sandy wastes and moorland, much of it sheltered from the sweep of the winds by a line of sandhills, which rose to a height of thirty to forty feet. About 1780 the first attempts were made to drain the moor, seemingly without much success, for it fell to subsequent owners of the land to render some of the western portion fit for cultivation. Further drainage schemes were carried out in later years, and in *The Status and Distribution of Wild Geese and Wild Duck in Scotland* (1939) John Berry refers to the great reduction in the number of Teal consequent upon the drainage scheme of 1876. Towards the end of last century the Morton Lochs were excavated for commercial fish-rearing, and these artificial lochs caused further changes in the western part. What had been arid, sandy moorland became fit for cultivation, and today most of the ground between the Tayport/Leuchars railway line and the road is being farmed. Since 1921 most of the remaining moorland has been systematically drained and planted by the Forestry Commission, and Tentsmuir reduced to a mere vestige of its former state. Lochans and marshes have disappeared from almost the whole area; large tracts of open moorland have been planted with trees, and only Earlshall is left in a comparatively unspoiled state.

Tentsmuir may be regarded as divided into three, the northern or Scotscraig section, the middle or Kinshaldy section and the southern or Earlshall section. Originally, cover over the moor varied widely, ling and heather (*Calluna* and *Erica*) grew on the flats and was thick in places because burning had to be restricted to avoid wind-scour. The sandhills were thinly covered with grass and sedge, and most of the flats bore mainly coarse grass, with sedge and sorrel. The wet areas contained mainly bog plants. On some of the flats both birch and Scots pine were present.

For a considerable period up to 1914 the Scotscraig section was preserved as a bird sanctuary by various proprietors, especially the Berrys of Tayfield, but the years of the first World War saw the near extinction of its character as a sanctuary through the ruthless collection of eggs. In 1919 Scotscraig came into the possession of the City of Dundee and for a short time a watcher was appointed to safeguard the birds during the nesting season. In 1924 this section was sold to the Forestry Commission for tree planting. Before this, in 1921, the Commission had purchased the centre section at Kinshaldy, and almost immediately had started to plant trees. Thus ended some fifty years of active protection of a nesting population of birds of great interest and value. Here, at sea level, were congregated together at nesting time birds of the shore, the moorland, and of the hill-side.

As the ground came under the care of the Forestry Commission the moor was enclosed with wire-netting to keep out rabbits, and while these fences effectively protected the young trees they also prevented many broods of young Eider and Shelduck from reaching the sea. The forestry workers did what they could by passing over the fences any broods which they met, but large numbers of young birds were lost each year. As the trees encroached more and more on the moor the nesting birds withdrew from their traditional sites on Scotscraig, but many of them found new sites to the south on Earlshall. By 1936 numbers comparable with those on former sites had established themselves there, and were being protected by the owners of the ground. Terns continued to nest on the sands at Scotscraig but, being afforded no protection, lost most of their eggs each year until eventually they left that area for good.

At Earlshall the first major change came with the advent of the aeroplane, when a large part of the south-west portion of the moor was acquired by the Air Ministry and an airfield constructed. This was greatly enlarged during the Second World War, when the nesting ground was considerably curtailed. About 1930 bombing and machine-gun targets were established off the east shore and during the war these were extended to included the whole shore and sea area. The second major alteration was the acquisition by the Forestry Combission of the southern third of the moor and the subsequent planting of what is now known as the Rires Forest. Both of these alterations had an undoubted effect on the nesting birds and, but for the foresight of the present owner, the Earlshall moor could have gone the way of the rest, and Tentsmuir as a worthwhile bird-haunt would have ceased to exist. The whole of the moorland at Earlshall became a private sanctuary, however, and a very great measure of protection was given to all, or nearly all, the nesting birds.

Today, the effective area at Earlshall extends to about a thousand acres, most of it moorland and marsh. The ground is very sandy, with sandhills and bunkers in the more northerly portion. There is a small deciduous wood of mainly birch and alder in mid-moor—it contains also a few large old Scots pine—and to the west of this lie two marshes, or lochans. Along the western edge of the wood lies the Canal Loch and this is divided by a long, narrow ridge from the remains of another lochan, known today as the Beddie Myre. Both of these wet areas are shallow and muddy, and apt to dry up in the less rainy summers. The ground to the west of these marshes is very sandy, covered in parts with heather and short grass, with here and there small reed beds and patches of sedge. To the east of the deciduous wood and midway between that and the sea, lies another small marsh, while dotted here and there over the whole extent of the ground are many small pools, usually dry in summer. The cover on the eastern half, as well as that of the ground between the deciduous wood and the Rires Forest, consists of coarse grass, with some sedge and heather, and reeds in the wet places. Drainage ditches cross the moor at several places but these are generally no more than two to three feet wide and perhaps four to six feet deep. Cattle were introduced to the moor about 1950 and have already undoubtedly much influenced the ground cover.

During the late war the shore-line was covered with lines of anti-tank blocks, and the flats of Tayport Bay, as well as the East Sands, were studded with poles set in concrete to prevent aircraft landing on the beaches. In this area there have been considerable changes in the levels of the shore and flats, particularly on the East Sands. The anti-tank blocks were originally built just above the high water level of spring tides but many are now buried under a series of new sandhills, some of which are now ten to twelve feet high. Marram grass has established itself on these new dunes, which are now well above the highest tide levels. The prevailing wind from the south-west seems to have little erosive action on the dunes, while the strong winds and gales which occasionally blow up from the east are gradually building them up with fresh sand from the shore. At the extreme north and south ends of the east shore new spits of sand and shell are being formed and have increased greatly in size in recent years. In the north, Tentsmuir Point has been acquired as a National Nature Reserve where the building up process can be studied in detail; at the south the spit known as Shelly Point has, since 1950, become the main nesting ground of terns in the area. During the winter months it is the gathering place for huge flocks of waders and wildfowl at high tide. A bay has been formed between Shelly Point and the Rires Forest; this is uncovered between tides and is favoured as a feeding ground by many waders. It is also much used by wildfowl during the winter for it is little disturbed by shore-gunners. The east shore of Shelly Point lies along an inlet from the Eden Estuary, an inlet which has increased greatly in size in recent years. This is sheltered from all but northerly winds, the comparatively calm waters attracting many ducks and other water birds. Grey and common seals also haul out on the banks of this inlet. There is little sand on the banks of the Eden, the estuary bed being soft, slimy mud, with here and there small mussel beds.

Another part of Tentsmuir which is of importance embraces the Morton Lochs. These artificial lochs, which were made towards the end of last century, lie about a mile south of Tayport and the same distance inland from the sea. The two main lochs cover an area about half a mile long and on average seventy yards wide, and are separated by a roadway. Lying roughly north and south, the North Loch is the larger, being some five hundred yards long, and about twice the length of the South Loch. Both are quite shallow and apt to dry out somewhat in summer; they rapidly become ice-bound in winter. The ground to the west of the lochs is marshy and wet, with dry, bracken-covered hillocks where the earth from the excavations was dumped. Rough grass and sedge, along with other plants, formerly grew on these hillocks but, as so often happens, fought a losing battle with bracken. The fish-rearing experiment was initially very successful, large quantities of carp and other coarse fish being produced. Trout-fishing, however, became more lucrative but, since there was no spawning gravel, artificial stocking was essential. The fishing interest was given up in the late 1930's, when stocking ceased, and in 1939 the lochs dried out in summer for the first time. In spring and autumn, and often in winter, the exposed mud attracted many waders, including a few of the rarer species on the British list.

On 19th May 1952 the Morton Lochs were formally declared a National Nature Reserve, the first part of Tentsmuir to be so treated, and considerable alterations were made to the ground. The North and South Lochs were connected by a series of deep ditches so that the water levels could be controlled by a single sluice. This has tended to raise the water level and it is now seldom that it drops sufficiently to expose the muddy bottom; as a consequence fewer waders now visit the area. One useful function of the lochs will be the study of the controlled raising and lowering of the water level on surrounding land, for this is a matter of economic importance to land near hydro-electric schemes and reservoirs.

The new ditches isolate as an island a few acres of rough ground between the North and West Lochs and it is hoped that nesting ducks will find sanctuary here from foxes and other predators. When the area was taken over by the Nature Conservancy, bracken was rampant and few signs of other vegetation were to be seen. Attempts have been made to clear the bracken and already new grass and other plants are firmly established. The burn supplying the lochs is spring-fed and shallow, and does not seem to have maintained any fish-life, except sticklebacks, with the result that the lochs were for a time almost devoid of fish, except eels, although a few roach have recently been reintroduced.

The Reserve is almost surrounded on three sides by Forestry Commission property, recently planted with trees. Tree planting on the Reserve has been confined to the provision of shelter, and as the trees grow they will provide a screen for the lochs, as well as concealed approach for the naturalist. Two permanent observation hides have been erected, one on either side of the North Loch.

When compared with the ten square miles which form Tentsmuir, the fifty-nine acres of the Morton Reserve may seem of little consequence. The lochs have, however, attracted many birds in past years, adding many new species to the Tentsmuir list, and are well worth preserving. The acquisition of the lochs gives rise to the hope that in the not too distant future the remaining unspoiled portions of Tentsmuir may also be brought under Conservancy control.

2.—IMPORTANT BREEDING SPECIES

Comparatively little has been published on the early history of the birds of Tentsmuir and even today the only comprehensive account is to be found in the manuscript *Birds of North Fife* by Henry Boase. Sibbald in his *History of Fife and Kinross* (1710) gives a list of sea-birds found along the Fife coast but makes no specific mention of Tentsmuir. In *A Fauna of the Tay Basin and Strathmore* (1906) Harvie-Brown gives some information on certain species but, generally speaking, this work is of little practical value to the present day observer on Tentsmuir. From various papers read to local societies it is possible to obtain some idea of the nesting birds, especially terns, during the latter half of the nineteenth and the early years of the present century, but it is regrettable that so little information is generally available on this once unique area. Most of the information given by Boase and others concerns only the northern, or Scotscraig, section and notes from the more southerly parts of the area are comparatively few. Up to the time of the afforestation, however, the main colonies of nesting birds were at Scotscraig, and the move to Earlshall took place from about 1930 onwards. The more important nesting birds were studied in some detail by local ornithologists, and from their observations and notes it is possible to build up a picture of these birds to 1926 or so.

It is not my purpose to deal in detail with all the species that have nested on Tentsmuir, but only the more interesting groups, and it is with these birds that the following remarks are chiefly concerned. Notes on nesting are given in the short statement on each bird in the check-list.

Terns.

As a nesting place of terns, Tentsmuir was, until 1924, one of the most important on the east coast, probably second only to the Farne Islands off Northumberland. The five species of the genus *Sterna* which nest regularly in this country have all at one time bred within the limits of the area, four of them annually and in some numbers. On more than one occasion all five species have nested in one year. Prior to 1924 the large colonies were all situated in the Scotscraig division, and though these enjoyed a measure of protection there was, in addition to natural hazards, an annual drain on them at the hands of egg-collectors. Even before the planting of trees put an end to them the colonies suffered many changes and vicissitudes; apart from man, the main adverse factors were probably drifting sand and flooding of the breeding sites by exceptionally high tides. After the colonies were finally broken up many of the birds found new ground to the south where, after a time, numbers comparable with those at Scotscraig were found. They were not allowed to settle there for long, however, for during the last war the whole of Tentsmuir became a military camp and the terns were again driven from their nesting sites. Today, numbers are beginning to build again but a reasonable measure of protection will have to be given to the nesting sites if the terns are to return to something like their former strength.

That the **Common Tern** *Sterna hirundo* had nested on Tentsmuir for many years prior to 1900 is certain, but next to nothing is known of the size of the colonies. Considerable numbers of eggs were seen in 1910 but no estimate was made of the number of birds nesting. In the few years that followed there were fluctuations in the population but, according to Boase, these variations were almost directly in sympathy with the weather conditions during the first days of May when the birds were on their way north to their nesting grounds. During the First World War it is doubtful whether many young were reared, because of persistent egg-collecting, but in spite of this numbers were exceptionally high in 1920 when some twelve hundred pairs nested. In the following year numbers nearly doubled and the nesting area expanded greatly though from then onwards numbers showed a steady decline to below average. Nesting for the most part inland on the moor, this species responded noticeably to what protection was given it and this may account for the sudden increases after the war years. It also meant that this was the first species to suffer by afforestation, and when the ground was acquired by the Forestry Commission in 1924 the preliminary preparations for the planting of trees saw the beginning of the move away from Scotscraig. By 1927 large numbers were nesting on the east shore, and the move to Earlshall and the coastal strips was also well under way. Once again numbers began to rise and in 1930 about a thousand pairs were nesting on Earlshall Moor, increasing to two thousand by 1936. Numbers continued to grow in subsequent years and the large measure of protection given birds on Earlshall was perhaps the main factor in this increase. High figures were maintained in the first two years of the Second World War, but in 1942 artillery ranges were established on Earlshall and the terns were delivered an almost fatal blow. Nesting was well under way, most birds sitting on eggs, when practice shoots were begun over the nesting sites, forcing most birds to leave before their eggs hatched. In the years which followed a few pairs tried to nest but seldom managed to keep their eggs, which inevitably found their way into service kitchens. After the war small numbers of Common Terns returned to the coastal strips, and in 1950 about thirty pairs were nesting on Shelly Point. The next two years saw further small increases, a total of perhaps sixty pairs nesting in 1952. Two new colonies were found in 1953, one of about fifty pairs near the old site on Earlshall, the other of about the same number in the new dunes on the east shore. In addition, over a hundred pairs nested on Shelly Point, giving a total of at least two hundred pairs in the whole area. Nesting conditions were good and a certain amount of protection was given to the birds at Shelly Point, with the result that a good crop of young birds was successfully reared. Numbers fell somewhat in 1954, and again in 1955, and probably no more than a hundred pairs nested in each year. This fall in numbers coincided with the formation of a new ternery at Buddon Ness in Angus; it also coincided with lack of protection. Visits to the east shore and Shelly Point in 1956, and again in 1959, showed that only about seventy pairs were nesting. The colony was afforded no protection and, in addition, there was considerable disturbance from low flying jet aircraft from the nearby airfield.

Unlike the previous species, the **Arctic Tern** *Sterna macrura* has only recently nested in any numbers in the area, the earlier records being of no more than fifty pairs. A colony is said to have been found on the east shore in 1885, but Harvie-Brown gives no indication of the numbers nesting. From then until 1914 the bird was doubtful as a breeding species and was looked upon as a passage migrant only. In 1914 a few nests were found on the east shore and from then onwards it seems to have nested annually in small numbers, always on the east or northern margins of the moor. The species suffered greatly at the hands of egg-collectors, also from sand-drift and flooding, so that the number of young reared annually was small. By 1924 the total number known to be nesting over the entire area was about fifty pairs, and this continued for the next few years at least. In 1936 about thirty pairs nested on the shore at Earlshall, but it is not certain whether breeding continued elsewhere. Nesting went on at Earlshall up to the war years, when the Arctic Tern suffered the same fate as the Common, few eggs escaping the searching troops. A few nests were found on Shelly Point in 1948, but it was not until the following year that numbers comparable with the pre-war years were recorded. From 1949 onwards numbers increased annually and the Arctic Tern became the most numerous nesting tern on Tentsmuir. Seventy to eighty pairs nested in 1950, about one hundred and fifty pairs in 1951, two hundred and fifty pairs in 1952, while in 1953 about three hundred and fifty pairs nested on Shelly Point alone. In addition, an attentuated colony of one hundred and fifty pairs was found on the east shore, bringing the total for the whole area to about five hundred pairs. From 1950 to 1953 the colony on Shelly Point was given a fair amount of protection and this may be partly responsible for the remarkable build-up in numbers during these years. Unfavourable weather conditions took a heavy toll of young birds in 1950, but in succeeding years there was a good annual hatch and a large percentage of young was successfully reared. For various reasons the author and his wife found it impossible to continue protecting this colony, and visits made at odd periods during the years 1954/59 showed a considerable annual decrease in numbers. In 1959 not more than one hundred and fifty pairs were nesting and, as with the Common Tern, were having to put up with disturbance from low-flying aircraft. Members of the public had also found their way to the area and were using the sands as bathing beaches, and in some cases the terns' eggs as food supplies.

Numbers of the **Little Tern** *Sterna albifrons* nesting on Tentsmuir have never been as large as the others and, as with the larger species, it has suffered many ups and downs in the past. Harvie-Brown states that it nested in increasing numbers in the twenty years prior to 1905, when over thirty pairs bred. From then until 1947 the information available is mainly for the northern portion, and little is known of what was happening at Shelly Point or Earlshall until 1936 at the earliest. Some pairs nested at Tentsmuir Point, and on the east shore, the highest count being of sixteen pairs in 1924. From then onwards the population fell to a few pairs in these areas. In 1953 no Little Terns were nesting along the length of the east shore to near Earlshall, neither were any found at Tentsmuir Point, although in 1958 between twenty and thirty pairs returned to nest at the latter site. On the shore at Earlshall, and on Shelly Point, nesting has been known since 1936, though no note of numbers can be traced. The species nested in small numbers until the war years but the position during the war is somewhat obscure and it is doubtful whether any succeeded in nesting. In 1948 a few pairs were nesting on Shelly Point; numbers increased in each succeeding year until 1953 when about seventy pairs nested. The small size and protective colouration of the young Little Tern make detection difficult, and except for 1953 it is hard to say how many reached the flying stage. In 1953 careful watching and searching showed that a large percentage of eggs was hatched and many young safely fledged. Numbers fell to about forty pairs in 1954 and to thirty-five pairs in 1955. In 1959 only twenty nests were found on Shelly Point.

The history of the **Sandwich Tern** *Sterna sandvicensis* is not as happy as that of the other species, for this fine bird seldom nests now in any numbers on Tentsmuir. It is a comparative newcomer to the scene, at least in so far as the present century is concerned, for it was looked upon as a casual visitor until 1905. In 1906 a colony of one hundred and thirty pairs was found at Scotscraig and this would seem to be the first record of nesting. This colony dwindled rapidly and in 1912 only one nest with eggs was found. No eggs were found in the next two years but in 1915 some three hundred and fifty pairs nested, with about three hundred pairs in 1916, but then egg-collecting started and the birds were driven from the moor. Apart from a single abandoned egg in 1921, it was 1922 before any more nests were found, but all the eggs were stolen, and the birds finally departed. In 1923, although the first eggs were stolen, about four hundred pairs eventually nested on an easily watched area. These nests were carefully protected and many young successfully reared. This was to be the last nesting known on Scotscraig Moor, the preparation and subsequent afforestation of the ground driving the birds away. In 1927 a new colony of about five hundred pairs was found on the east shore, but only eight pairs returned to nest the following year ,and from then until 1933 none nested anywhere on Tentsmuir. In 1933 a colony of about a thousand pairs was found on Earlshall and from then onwards the birds returned each year in varying numbers, the average being three to four hundred pairs. This healthy state continued until 1942 when gunfire from the artillery ranges on Earlshall forced the birds to leave before their eggs hatched. In 1945 fair numbers were laying but the eggs were taken by R.A.F. personnel stationed nearby, and once again the birds left. A few pairs attempted to breed in 1946 but without success, and this was the last real attempt until 1951 when twenty-two pairs tried to nest on Shelly Point. The eggs were stolen within a week of being laid, only one nest surviving and only one young bird being reared. Since, other nesting attempts have been made; in 1953 three pairs laid on Shelly Point, with a further six pairs near the old site on Earlshall. The eggs on Shelly Point were eaten by gulls, but the birds on the moor were quite successful. Single nests were found in 1954 and 1955, while in 1956 forty-eight pairs nested on Shelly Point with moderate success. The fluctuations in numbers and erratic nesting of this tern are not confined to Tentsmuir but seem to be characteristic. The treatment meted out to it did not encourage it to nest regularly, however, although when it was afforded a high measure of protection it continued to breed year after year at Earlshall with what was probably a natural fluctuation in numbers. Sandwich Terns are usually present at Shelly Point and along the east shore in summer; given a chance, there is no reason why they should not nest regularly.

The **Roseate Tern** *Sterna dougallii* has nested only a few times and can only be looked upon as a casual breeder on Tentsmuir. Pairs have been seen on several occasions, both at Shelly Point and over the moors, but only twice have nests been found, one in 1927 and one on Earlshall in 1936. A report that twenty pairs were nesting on Shelly Point in 1956 is quite unacceptable. At least four Roseate Terns were seen in flight over the ternery but no nests were actually found. Nests which were marked and reported as those of Roseate Terns were in fact Sandwich Tern nests, and this was confirmed by several competent observers.

Ducks.

Although eight different species nest or have nested on Tentsmuir, most of these are common enough elsewhere and are dealt with in the detailed statements. Two species, however, deserve special mention, the Eider *Somateria mollissima* and the Shelduck *Tadorna tadorna,* for these have been affected more than the others by the changing conditions on the moor and, like the terns, have suffered greatly from the afforestation. They were forced to seek new nesting sites on Earlshall Moor where for many years their numbers were very much smaller than those at Scotscraig.

It is not known when the **Eider** first nested on Tentsmuir but a hundred years ago it was said to be commonly doing so and in fair numbers. Towards the end of the last century numbers were reported to be small and remained so for some years. Little is known about the true state of affairs up to about 1919, when it was estimated that twenty-five pairs were nesting on Scotscraig, with others at Kinshaldy and Earlshall. From 1914 onwards they showed a marked increase and by 1910 fifty pairs were breeding on Scotscraig, increasing to about eighty pairs by 1924. Additional pairs were certainly nesting on the other sections, but no estimate can be found of numbers or of whether these were comparable with Scotscraig. The afforestation at Scotscraig saw the end of the Eider on that ground, though a few pairs clung to the old site and tried to bring off their broods. These were invariably lost because of the ducklings' inability to get through the rabbit-proof fences which had been erected around the newly planted ground. By the mid 1930's the numbers of Eider nesting at Earlshall were comparable with those of the last years at Scotscraig, and the birds were enjoying a large measure of protection. This continued until the 1939/45 War, during which the Eider was almost lost as a nesting species. Foreign troops stationed on the moor trapped and shot Eider, as well as other ducks, and took all available eggs. When they discovered the confiding nature of the sitting duck many dispensed with guns and resorted to clubbing it on the nest. In addition to this wholesale destruction of nesting birds, Eider were systematically shot at all seasons for sale, a practice which continued for a few years after the war, with serious results. The breeding stock at Earlshall was decimated, very few pairs nesting up to 1949, and at that time the position was critical. Foxes and stoats took toll of the few pairs that did nest, and any Eider fortunate enough to hatch her eggs almost invariably lost her ducklings to marauding gulls and Crows. From 1945 onwards the gamekeeper at Earlshall waged his own private war, taking a heavy toll of Crows and foxes, and in 1950 reported an increase in the number of sitting Eiders. Further increases were noted during the next two years, and in 1953 at least fifty pairs were known to be nesting on Earlshall Moor alone. In addition a few pairs were breeding on the coast at Shelly Point and Tentsmuir Point. Numbers were maintained, if not slightly increased, in 1954 and 1955, and once more large "rafts" of Eider ducklings were commonplace on the Eden. Most, if not all, of the credit for the rehabilitation of the Eider on Tentsmuir must be given to Robert Skinner. With his job as gamekeeper he combined a genuine love for birds and he went out of his way to ensure that Eiders, as well as other nesting birds, suffered the minimum amount of disturbance.

The **Shelduck** was at one time very numerous as a breeding bird on Scotscraig, while smaller numbers were said to nest at both Kinshaldy and Earlshall. On Scotscraig it suffered heavily each year at the hands of poachers, but this seems to have made little difference to the numbers nesting. The Shelduck lost its main nesting ground when the new forests were planted, but it did not make the change to Earlshall as readily as did the Eider. Numbers were never very large in the prewar years, but those which nested were well protected and a good annual hatch seems to have been maintained. During the 1939/45 War the Shelduck suffered the fate of the Eider, and numbers dwindled until only a few pairs were breeding. Many returned to Earlshall when the troops had gone, but foxes, which had increased greatly, played havoc with the birds in their nesting burrows. By 1950, however, practically all the foxes had been shot, or otherwise disposed of, and the Shelduck once more returned to nest in fair numbers. By 1953 the breeding population at Earlshall was in a healthy state, and a census in 1954 showed that between one hundred and fifty and two hundred pairs were nesting. Several pairs were also nesting at Tentsmuir Point and Shelly Point. In August of that year over three hundred and twenty juvenile Shelduck were counted on the inner estuary near Guardbridge, while others were present elsewhere on the coast.

Other Species.

Another nesting bird of importance is the **Black-headed Gull** *Larus ridibundus* for although this did not nest on Tentsmuir before about 1902 it is today the most numerous breeding bird in the area. The actual year in which the species first bred on the moor is doubtful, but it had done so by 1904, and by 1912 fifty pairs or so were breeding. There was a steady annual increase in subsequent years, and by 1921 about a thousand pairs were nesting. In 1922 numbers fell to about three hundred pairs, and by 1925, after two years of heavy raiding, to about one hundred pairs. These birds all nested at Scotscraig but after 1925 most of the breeding stock moved to Kinshaldy and Earlshall where they were not so easily molested. The final nesting at Scotscraig was about 1930. Numbers at Kinshaldy were generally less than five hundred pairs and the main build-up began to take place at Earlshall from 1930 onwards. As the forests expanded, so were the gulls forced to move further south and by the mid 1930's the only colony was on Earlshall. Nearly four thousand pairs nested there in 1936, but two years later only half that number bred, and there was a further decrease during the war. The main colony was then situated in a marsh in the eastern half of Earlshall near Big End House, but in 1946 the majority of the birds moved to and started to colonise the Beddie Myre, where the main gullery is today. The numbers present then would be about a thousand pairs, but a steady annual increase has been taking place, the population in 1953 being estimated at about three thousand pairs. These numbers were maintained throughout 1954 and 1955. Since 1953 the Canal Loch has supported a steadily increasing number of birds, and small numbers (less than two hundred pairs) have also returned to the old site near Big End. In 1953, and again in 1954, twenty pairs nested amongst the Common Terns in the sand dunes on the east shore, while in 1955 a few pairs had taken to nesting on Shelly Point. The percentage of young reared each year is high, because the colony is protected and there is no organised egg-collecting. There is plenty of evidence to show that this gull is an undesirable neighbour to nesting Eiders and terns, and eventually some thought will have to be given to the question of control. Common Terns which nested amongst the gulls in the Beddie Myre in 1950 and 1951 were unmolested, but others which were nesting on Shelly Point were not so fortunate and lost many eggs and young. In 1953 the writer was just too late to prevent a few Black-headed Gulls from taking the eggs of Sandwich Terns which had been laid on Shelly Point. They have also been seen to take nesting terns on a number of occasions.

Of the few species which have been lost as breeding birds, the greatest loss is perhaps the **Dunlin** *Calidris alpina* which at one time bred in some numbers but gradually dwindled until the last nest was recorded in 1937. Tentsmuir was one of the few remaining mainland nesting places of this species at sea-level, and this made the loss all the more felt. Prior to 1880 the Dunlin was said to have nested in large colonies but by that date numbers were on the decline. Little is known about its status in the early part of this century, but in the few years prior to afforestation six pairs were known to nest annually at Scotscraig, with a further twenty or more pairs at Earlshall. The decline in numbers coincided with the draining of the moor and was helped by egg-collectors, and by 1930 no more than five pairs were left on Earlshall. One by one these pairs disappeared until, in 1937, the last known clutch of Dunlin eggs on Tentsmuir was taken by an egg-collector. Though Dunlin is summer plumage are seen on the shore every summer the species has not attempted to nest again and it is doubtful if it will ever do so. Ground conditions have been radically altered and are probably no longer suitable for nesting.

The history of breeding birds on Tentsmuir makes depressing reading, and although those at Earlshall are still adequately protected there is no guarantee that this will always be the case. The demands of modern aircraft for longer and longer runways may mean further encroachment on the moor, but what is perhaps more serious is the increasing amount of disturbance from aircraft taking off and landing. Helicopters, too, cause their own peculiar disturbance, which amongst the wintering ducks and waders is akin to panic. The east shore has, morever, been "discovered" by the public as a safe bathing beach and inevitably this will have its effect on terns and other shore-nesters. Proposals for motor-cycle races on the sands have also been made but fortunately these have so far come to nothing. It is to be hoped that steps will be taken to ensure the continuance of Earlshall Moor as a bird sanctuary, and the Eden Estuary as a wildfowl refuge, before it is too late.

3.—CHECK-LIST OF TENTSMUIR BIRDS

In all, one hundred and ninety-two species can be admitted to the list of birds recorded on Tentsmuir. A further seven not included in this total, are worth mentioning as they have been recorded from very near the boundaries; they have been placed on the list but within round brackets. Doubtful records have been placed within square brackets. The moor's boundaries, for the purpose of this list, are: on the north, the shore-line from Tayport to Tentsmuir Point, and the southern half of the Tay Estuary; on the east, the shore from Tentsmuir Point to Edenmouth, including the Abertay Sands as well as the immediate coastal waters; on the south, the south bank of the Eden Estuary from Guardbridge to the South Horn, and the waters of the whole estuary; on the west, the Tayport/Guardbridge road by way of St Michael's and Leuchars. Altogether the area covers some ten square miles.

The main objective in producing this check-list has been to give an account of the birds of Tentsmuir as they are today. The statements made are based mainly on my own observations, made on over three hundred visits to Tentsmuir during the years 1949 to 1956, and further occasional visits between 1957 and 1960. Records of species not reported during this period have mostly been obtained from Boase's work, or from a list compiled by the late William Berry. Additional records since 1956 come mainly from the Nature Conservancy.

The birds included in the list may be classified as follows:

Residents	69
Summer Visitors ...	20
Winter Visitors ...	24
Passage Migrants ...	31
Casual Visitors ...	48
Total	192

It must be borne in mind that these classifications are somewhat arbitrary, for in many cases species occur as both summer or winter visitors and passage migrants, sometimes all three. Also, the term "resident" is rather ambiguous, as not many birds are resident in the true sense of the word—*i.e.* the same individual present the year round. Many so-called residents occur as summer and winter visitors, as well as on passage, and where possible I have tried to show this in the statement on each species. The casual visitors, which form over a quarter of the total, can be further sub-divided into three groups; those which have been recorded only once (15), those which have been recorded twice (9), and those which have been seen on three or more occasions (24).

Breeding birds fall into more easily defined categories, and the eighty-four species and subspecies which nest or have nested within the limits of Tentsmuir are listed below. Three other species for which no definite records exist are worth mentioning. The Pintail and the Long-tailed Tit have been suspected of nesting although so far no nests have been found, and there is an unsatisfactory breeding record for the Siskin. Of the nine species which have been lost as regularly breeding birds, it is doubtful whether many will ever again nest on Tentsmuir. The Whinchat is perhaps the most likely of them to return.

Breeding regularly — 65

Little Grebe
Heron
Mallard
Teal
Shoveler
Tufted Duck
Eider
Shelduck
Mute Swan
Sparrowhawk
Kestrel
Partridge
Pheasant
Moorhen
Coot
Lapwing
Ringed Plover
Snipe
Woodcock
Curlew
Redshank
Black-headed Gull
Common Tern
Arctic Tern
Little Tern
Sandwich Tern
Stock Dove
Woodpigeon
Cuckoo
Tawny Owl
Long-eared Owl
Swift
Skylark
Swallow
House Martin
Sand Martin
Carrion Crow
Rook
Jackdaw
Jay
Great Tit
Blue Tit
Coal Tit
Treecreeper
Wren
Mistle Thrush
Song Thrush
Blackbird
Wheatear
Robin
Sedge Warbler
Whitethroat
Willow Warbler
Goldcrest
Hedge Sparrow
Meadow Pipit
Pied Wagtail
Starling
Greenfinch
Linnet
Chaffinch
Yellowhammer
Corn Bunting
Reed Bunting
House Sparrow

Breeding at times — 3

Short-eared Owl
Spotted Flycatcher
Stonechat

Bred on one or two occasions — 7

Gadwall (1)
Wigeon (1)
Common Scoter (2)
Grey Lag Goose (2)
Herring Gull (1)
Roseate Tern (2)
Twite (1 or 2)

Previously bred regularly; no longer do so — 9

Red Grouse
Black Grouse
Corncrake
Golden Plover
Dunlin
Hooded Crow
Magpie
Whinchat
Tree Sparrow

CHECK-LIST

Arrangement and scientific nomenclature follow the B.O.U. *Check-List of the Birds of Great Britain and Ireland* (1952), as amended by the Recommendations of the Taxonomic Sub-Committee in 1956 (*Ibis* 98: 157-68), and the 1957 decisions of The International Commission on Zoological Nomenclature (*Ibis* 99: 369). This check-list covers observations to the end of 1960, with a few later notes added.

1. Black-throated Diver *Gavia arctica*. Mainly winter visitor, single birds being usual. All recent records are for December to February. Two records for Morton Lochs, single birds in January 1909 and on 28th/31st December 1954.
2. Great Northern Diver *Gavia immer*. Mainly on passage, but a few winter records. Largest counts three (8th March 1951, 23rd January 1952, 7th February 1953). No records for Morton Lochs.

-. (White-billed Diver *Gavia adamsii*). One was present on the Tay Estuary for some weeks during February and March 1954 (*E.B.B.* 4: 49).).

3. Red-throated Diver *Gavia stellata*. The commonest diver, seen regularly from September to April, sometimes in large numbers, *e.g.* *c.* 70 off Edenmouth on 23rd January 1952. Several records for Morton Lochs, most recently a single bird on 19th December 1954.
4. Great Crested Grebe *Podiceps cristatus*. Mainly on passage, but also occasionally in winter. Largest counts, five at Tayport on 22nd February 1919, and four off Edenmouth on 23rd January 1952. No records for Morton Lochs.
5. Red-necked Grebe *Podiceps griseigena*. Casual. Single birds on the Eden in January and September 1906, and 26th November 1949, and at Morton Lochs in November 1928, are the only records.
6. Slavonian Grebe *Podiceps auritus*. Winter visitor to Eden and off east shore; birds in breeding plumage have also been seen in April. Highest counts are of six on 5th December 1954 and 3rd April 1955. Recorded on Morton Lochs on three occasions, the most recent being 1st March 1937.
7. Black-necked Grebe *Podiceps nigricollis*. Casual with only three definite records, single birds at Tayport on 2nd October 1920, on Earlshall in the summer of 1933, and on the Eden on 25th February 1953. Said to have been seen on Morton Lochs on several occasions, but no dates are given by William Berry.
8. Little Grebe *Podiceps ruficollis*. Breeds regularly at Mor-

ton Lochs, three to four pairs being usual. Always present there from March to October. There are only two records for Tentsmuir outwith this period, single birds on the Eden on 10th February 1952, and at Morton Lochs on 5th December 1954.

-. (Storm Petrel *Hydrobates pelagicus*. One seen in Tay Estuary on 16th October 1946).

9. Manx Shearwater *Procellaria p. puffinus*. Autumn passage migrant, usually seen off Tentsmuir Point or east shore. Several records for July and August, largest count being seven on 5th August 1923.

10. Fulmar *Fulmarus glacialis*. Not common, most records being of corpses. Has nested at St Andrews since 1946 and is seen near Edenmouth on occasions in summer. One report only for Tayport—a single bird at the harbour on 23rd August 1952.

11. Gannet *Sula bassana*. Summer visitor off the coast and has been noted as far up-river as Tayport, three being seen near the harbour on 23rd August 1952. Earliest and latest records are 15th March and 24th October.

12. Cormorant *Phalacrocorax carbo*. Common around the shores and in both estuaries the year round, with largest numbers in winter. Particularly numerous near Edenmouth and Tentsmuir Point, counts showing c. 200 and c. 150 respectively on many occasions. Does not nest on Tentsmuir.

13. Shag *Phalacrocorax aristotelis*. Not common at Tentsmuir. Records for all months, mostly for single birds.

14. Heron *Ardea cinerea*. Until 1947 a small heronry existed at Earlshall, up to six pairs nesting annually. Severe weather in early 1947 put an end to this colony. In 1945 four nests were found at Kinshaldy, since when three to five pairs have nested annually. Numbers increase greatly in autumn, *e.g.* flock of 44 at Earlshall on 6th September 1952, and one of 36 on Eden on 21st August 1955. Winter numbers seldom more than ten. Seen at Morton Lochs at all seasons.

15. Bittern *Botaurus stellaris*. Rare casual. W. Berry records that one was shot at Morton Lochs on 6th April 1917, the skin being sent to the Royal Scottish Museum, and another obtained at Tayport on 2nd December 1925. These are the only records.

16. Mallard *Anas platyrhynchos*. Nests at Morton Lochs and Earlshall. Also occurs on passage and in winter. On the Eden numbers reach a peak in November, and again in February, up to c. 2000 being counted. Mid-winter numbers seldom rise above c. 1000 (see Wildfowl Counts). At Tayport, c. 500 has been the top count. Up to c. 500

have also been seen on Morton Lochs in spring. On Earlshall several hundreds have been flushed from the marshes from November to March.

17. TEAL *Anas c. crecca*. Nests annually at Earlshall (*c*.15 pairs), with a few pairs at Morton Lochs. Also on passage and in winter, and from autumn to spring is present on the Eden in good numbers. From 400 to 600 is usual, but 1450 were counted on 20th February 1955 (see Wildfowl Counts). Also found in winter on Earlshall where up to 300 have been flushed from the marshes. Numbers generally small at Tayport (usually *c*. 40), while at Morton Lochs up to 150 are common in winter (300/400 on 14th November 1960).

18. GARGANEY *Anas querquedula*. Occasionally in spring and autumn, mostly at Morton Lochs. Highest count there is six on 13th August 1947. In April and May 1952, and again in 1959, a pair spent several weeks at Morton. The only record for the Eden is of a male at Shelly Point on 25th May 1952.

19. GADWALL *Anas strepera*. Has nested on at least one occasion at Morton Lochs (1918), but is known chiefly as passage migrant and occasional winter visitor. A pair was present at Morton Lochs in April 1959, and a female was seen in July 1960. Highest count is twenty-five, at Morton Lochs on 29th January 1909, though such numbers are unusual. Generally, only one or two are seen from August to October, and occasionally from November to February. Has been recorded on both estuaries.

20. WIGEON *Anas penelope*. Nested for the first time at Morton Lochs in 1953, one pair producing young. One pair was present in summer of 1954 but nesting was not confirmed. Mainly on passage and in winter, largest numbers being found on the Eden (see Wildfowl Counts). Small numbers (300 or less) are seen at Tayport, while up to 200 are common at Morton Lochs from October to March.

21. BALDPATE *Anas americana*. Rare casual. An adult drake was seen on the Eden on 24th November 1919 (1920 *S.N*. 13), and Dr John Berry saw a drake at Morton Lochs on 12th and 13th October 1956.

22. PINTAIL *Anas acuta*. Regular on passage and in winter, mainly to the Eden where 100 to 150 is usual number (see Wildfowl Counts). A few records for Morton Lochs, the most recent being of three on 12th October 1955 and a fair number on 8th December 1957. Only six records for Tayport in recent years. Seen occasionally at Earlshall in summer, but nesting never proved.

23. Shoveler *Spatula clypeata*. Nests annually at Earlshall (*c.* 6 pairs) and Morton Lochs (2 to 3 pairs). Also occurs on passage and in winter, and up to 300 have been counted on the Eden (see Wildfowl Counts). Not very common in Tayport Bay, but invariably present at all seasons on Morton Lochs where the highest count has been 75 on 1st October 1955.

24. Red-crested Pochard *Netta rufina*. One record—a male bird which spent most of the winter of 1956/57 at Morton Lochs (see *British Birds* 52: 44).

25. Scaup *Aythya marila*. Regular on passage and in winter on the Eden; occasional at Tayport. Highest Eden count is 77 on 23rd March 1955, but 40/60 normal. Recorded only twice in recent years at Morton Lochs—a female on 20th February 1954, and a drake on 8th December 1957. One unsatisfactory nesting record—a clutch of eggs said to have been taken in 1880—mentioned by J. Berry. Not included in list of nesting birds.

26. Tufted Duck *Aythya fuligula*. Nests at Morton Lochs, four pairs breeding in 1954 and 1955. More numerous in winter at Morton (highest count 34) but is decidedly rare on both estuaries. A flock of twenty spent a month on the Eden during severe weather in February 1952, and a few were found there and at Tayport under similar conditions in February 1954. The only other Eden record is a drake on 23rd January 1955.

27. Pochard *Aythya ferina*. No records between 1949 and 1951. Since then has occurred regularly in small numbers at Morton Lochs. Most records are for February to April, but one pair was seen on 29th May 1953, and fifteen birds on 28th November 1958. Only one recent record for the Eden, ten on 16th February 1952, and two for the Tay, five at Tentsmuir Point on 18th October 1953, with six at Tayport on 5th December 1953.

28. Goldeneye *Bucephala clangula*. Mainly winter visitor, though some may occur on passage. Largest numbers are found on the Eden where *c.* 100 commonly in winter (200 in January 1951). Only small numbers at Tayport, but elsewhere in Tay area it is more numerous. Occasionally at Morton Lochs in autumn and winter, highest count being eight on 21st November 1954.

29. Long-tailed Duck *Clangula hyemalis*. Winter visitor in small numbers. Most recent Eden records are of single birds, the highest count being eight on 4th March 1951. Now comparatively scarce in Tayport Bay where only five records between 1949 and 1955, with a top count of 40 drakes on 25th January 1953. The vast flocks of up to 2,000 or more birds seen at Tentsmuir Point and men-

tioned by John Berry (1939) no longer occur. Has been recorded at Morton Lochs.

30. Velvet Scoter *Melanitta fusca*. Winter visitor, sometimes in large numbers, generally seen off the east shore where "rafts" have totalled over 500. Not so common in the estuaries. A pair was present on a small pond at Earlshall Moor in late May 1955. One record for Morton Lochs—a bird shot there on 26th October 1940.

31. Surf Scoter *Melanitta perspicillata*. Rare casual, last recorded in the Eden estuary on 30th May 1955 (1955 *S.N.* 110), and off Edenmouth—not St Andrews Bay (E. Crapper, pers. comm.)—in early January 1928 (*The Birds of Scotland*).

32. Common Scoter *Melanitta nigra*. Has nested at least once at Morton Lochs—a female in flightless moult and two juveniles found dead within the wire-netting fences of one of the plantations in 1947. In August of that year a pair of adults was seen on the lochs with two juvenile ducks which were not identified. In winter huge flocks, totalling over 2,000 birds at times, lie off the east shore, and the species is commonly seen in both estuaries in small numbers. Has also been recorded at Morton in winter.

33. Eider *Somateria mollissima*. Fifty to sixty pairs nest annually on Earlshall Moor, with other pairs on the coastal strips and at Shelly Point (see "Important Breeding Species"). Outwith the breeding season is found on both estuaries and on the sea in good numbers. Occasionally immense flocks are found on the Tay near Tentsmuir Point, *e.g.* *c.* 5000 on 6th October 1951, *c.* 10,000 on 16th February 1952. On 8th February 1953 a flock which stretched from Lucky Scalp to well beyond Tentsmuir Point defied counting. In places this line was nearly fifty birds deep and as it stretched for a mile and a half, upwards of 20,000 birds must have been present. Numbers on the Eden seldom exceed one hundred in winter. Has occurred at Morton Lochs, but not for many years.

34. King Eider *Somateria spectabilis*. Winter casual. Five were seen at Tentsmuir Point on 29th December 1927 (1928 *S.N.* 108), and in the period 1925/1935 John Berry (1939) recorded the species on five occasions off Abertay Sands.

35. Red-breasted Merganser *Mergus serrator*. Records for all months, but does not nest on Tentsmuir. Numbers are very small in summer, increasing during autumn passage (*e.g.* 150 at Tentsmuir Point on 28th September 1952), falling again in winter, when it is found on both

estuaries. Mergansers occasionally visited Morton Lochs when these were stocked with fish, but the only record in recent years is of four on 28th November 1958.

36. Goosander *Mergus merganser*. Casual, with few records in recent years, although it is regularly seen on the Tay west of Newport. The only Eden report is of twenty in October 1951. Has also visited Morton Lochs on occasions and seven were seen on 1st September 1926.

37. Smew *Mergus albellus*. Rare casual, not recorded since March 1928 when a female was seen on the Eden. No records from Morton Lochs.

38. Shelduck *Tadorna tadorna*. Nests on Earlshall Moor and coastal strips, and also at Morton Lochs (see "Important Breeding Species"). Most adults leave the area during July and August, only a few remaining with juveniles of the year. Wintering population arrives from the beginning of October, and from then until March or April large numbers are present on the Eden (see Wildfowl Counts). Usually less than fifty at Tayport in winter and seldom at Morton then.

-. [Ruddy Shelduck *Casarca ferruginea*. One of a pair was shot by W. Berry at Morton Lochs on 18th December 1934. These may have escaped from breeding pens at Lindores Loch.].

39. Grey Lag Goose *Anser anser*. Has nested at Morton Lochs on two occasions (1922 and 1931) but each time failed to raise a brood. Now occurs on passage and in winter in small to moderate numbers. Less than fifty have been usual, but 200/500 present in recent winters, and on 2nd November 1952 a flock of c. 1500 was on the Eden.

40. White-fronted Goose *Anser albifrons*. Has not been recorded for many years. Occurred mainly on passage in small numbers, occasionally in winter.

41. Bean/Pink-footed Goose *Anser arvensis*.

(a) Bean Goose *A. a. arvensis*. Occurs on passage and in winter in small numbers. Some present with other grey geese near Morton Lochs on 19th October 1952 and 21st February 1954. Last recorded occurrence was in 1956.

(b) Pink-footed Goose *A. a. brachyrhynchus*. The common grey goose of Tentsmuir, flocks often totalling several thousand birds. Occurs on passage, and in winter, largest flocks being seen in autumn. Each winter a large flock frequents the fields near Morton Lochs and these, together with geese from other parts of Fife, flight to the Eden at dusk. Geese from north of the Tay flight into the area at dusk, mostly to the Abertay Sands. At Morton the flock is usually c. 1000 strong, but

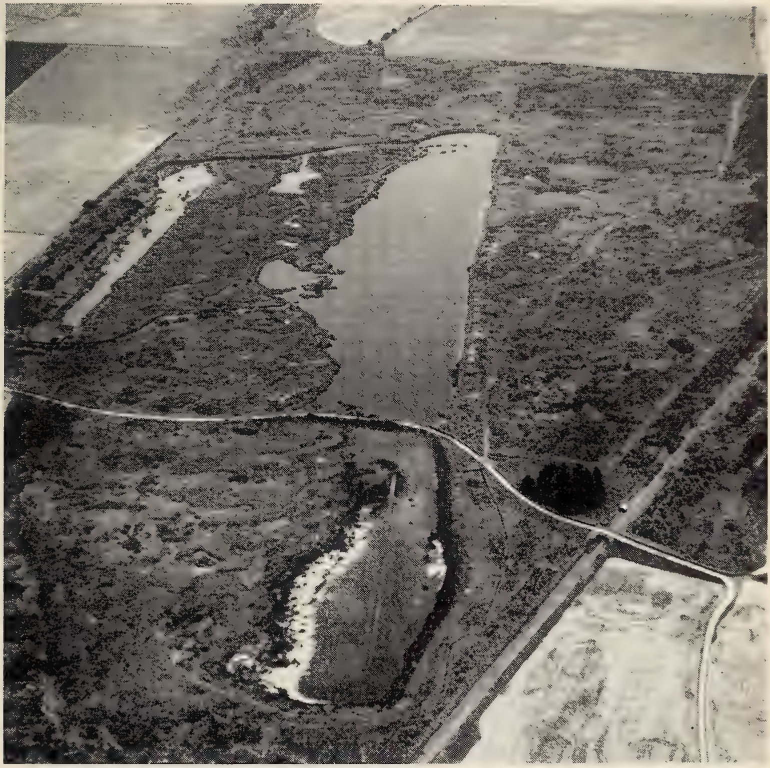

PLATE 7. MORTON LOCHS. Aerial view from the south.

University of Cambridge photograph.

Plate 8. Earlshall Moor, deciduous wood.

Photograph by J. Berry.

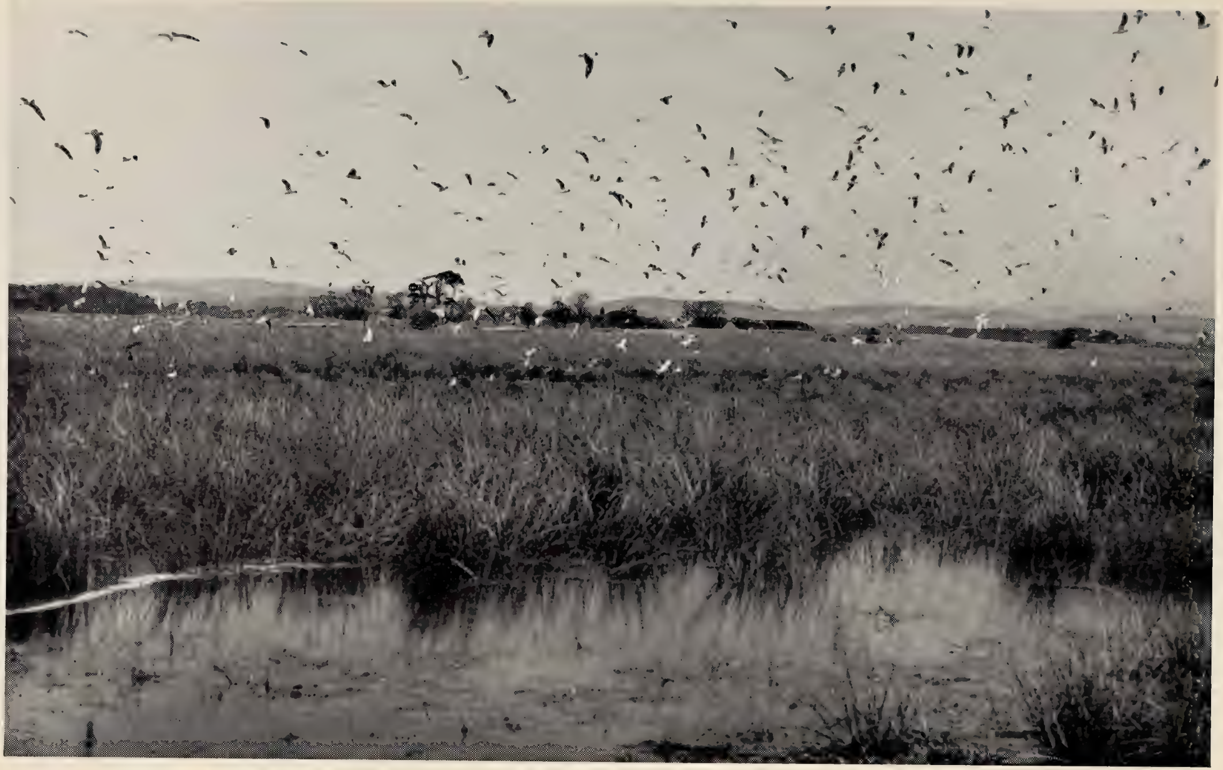

PLATE 9. EARLSHALL MOOR, Black-headed Gull colony.

Photograph by J. Grierson.

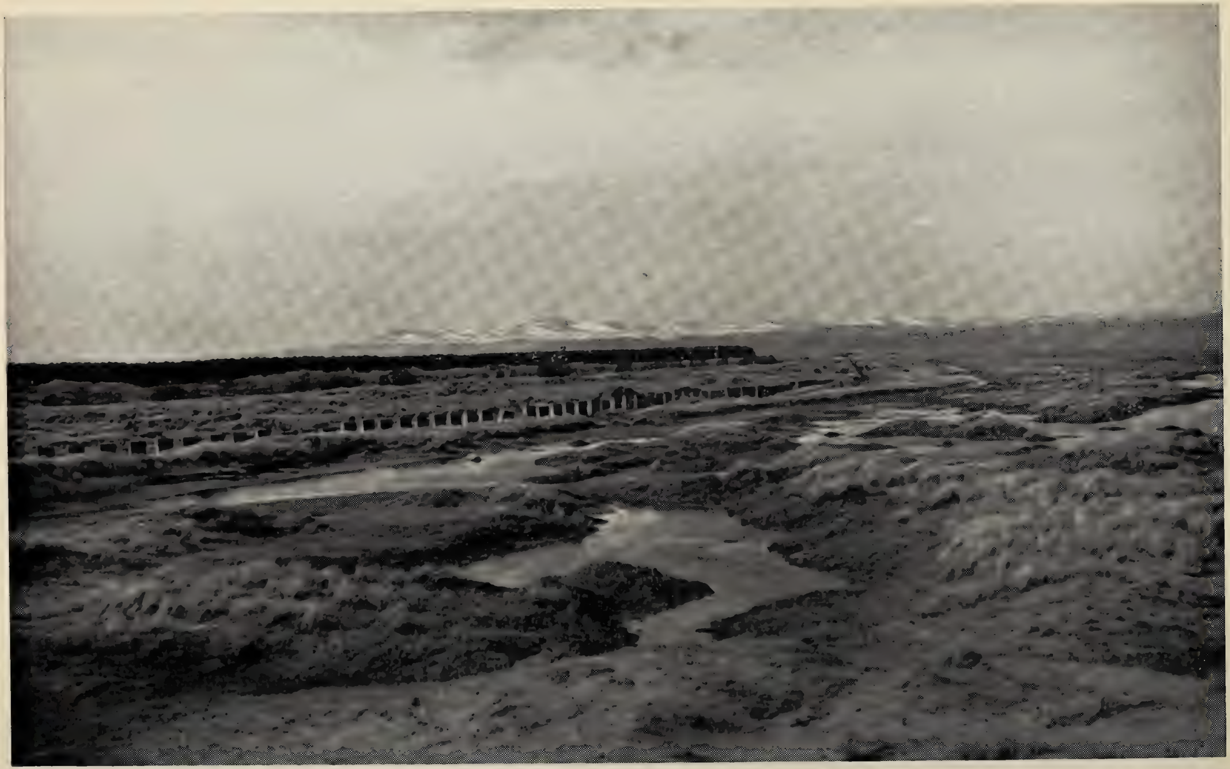

Plate 10. Tentsmuir Point.

Photograph by J. Berry.

up to *c.* 5000 have been seen. First birds arrive at end of September (early date 13th September 1952) and remain until April (latest date 26th).

42. Snow Goose *Anser caerulescens.* Rare casual. W. Berry records that one was obtained at Tayport on 11th January 1924, and the species identified in the winter of 1945/46.
43. Brent Goose *Branta bernicla.* Was once common in winter, over 100 being recorded on occasions, but is now a rare visitor. Latest records for the Eden are of several seen 17th/24th February 1953, and two on 1st March 1953. Only other record is one on east shore on 24th October 1954. The last two records were both of the Pale-breasted race *B. b. hrota.*
44. Barnacle Goose *Branta leucopsis.* Since 1949 a regular winter visitor in small numbers, generally seen with other geese at Morton. Mostly seen in groups of up to five birds, but 19 at Shelly Point on 8th October 1949. Occasionally birds at Morton have been examined at close quarters and the absence of rings on their legs suggests that these were truly wild birds and not members of the semi-domesticated flock at Tayfield.
45. Mute Swan *Cygnus olor.* Resident. One, sometimes two or three, pairs nest at Morton Lochs. Numbers increase in winter, especially at Tayport, and these are possibly from inland lochs. There is an annual rise and fall in numbers during autumn, suggesting local coastal movements. Present on the Eden the year round.
46. Whooper Swan *Cygnus cygnus.* Regular winter visitor to Morton Lochs, the highest count being 18 on 15th March 1953, and again on 7th November 1954. Occasionally seen at Tayport and Tentsmuir Point, but not recorded on Eden. In 1955 one bird remained at Morton until 31st May.
47. Bewick's Swan *Cygnus columbianus bewickii.* One record, of two at Morton Lochs on 1st January 1947.
48. Golden Eagle *Aquila chrysaëtos.* One record. An adult bird spent the winter of 1952/53 at Earlshall, and was also seen at Morton Lochs (*E.B.B.* 3: 28, 40).
49. Buzzard *Buteo buteo.* Irregular winter visitor, singly or in pairs. Latest record is of a pair which spent the winter of 1954/55 at Earlshall. No summer reports for many years.
50. Rough-legged Buzzard *Buteo lagopus.* Rare casual, the only record being of a single bird seen over Scotscraig in the winter of 1913 by W. Berry and others.
51. Sparrowhawk *Accipiter nisus.* Nests in the new forests and Earlshall. Is shot on sight at Earlshall. Seen annual-

ly on the Eden on passage. Occasionally recorded at Morton.

52. Honey Buzzard *Pernis apivorus.* William Berry records that the identification of three birds seen at the west end of Tentsmuir in the autumn of 1890 was uncertain, but one bird shot there at that time was undoubtedly a Honey Buzzard, and he examined it in the shop of a local bird stuffer. (Outside the area a pair was present near Newport for some months in the early summer of 1949. Breeding was strongly suspected, but unfortunately the female was shot on 23rd July and sent to the Royal Scottish Museum).

53. Marsh Harrier *Circus aeruginosus.* Irregular winter visitor. A pair was at Earlshall for the winter of 1950/51, two were seen a few times during the following winter, and one was at Morton on 8th November 1958. An earlier record refers to a single bird at Earlshall on 29th October 1937. There is a suggestion that Marsh Harriers bred there in 1937, when a pair was seen over the moor several times during the summer, and a young bird, not yet in full flight, was captured and sent to the Edinburgh Zoo. The records there show that it was received on 23rd December 1937, having been captured in October that year, and that it died on 17th November 1941. These rather unsatisfactory details cannot be considered sufficient to support a first breeding record for Scotland, and the matter is still under investigation.

54. Hen Harrier *Circus cyaneus.* Only three positive records for recent years—one shot at Tayport in August 1947, one seen near St Michael's on 2nd April 1953, and a pair at Earlshall for about two weeks in early March 1954. A harrier seen at Morton Lochs on 8th April 1955 may have been this species.

55. Peregrine *Falco peregrinus.* Occurs regularly on passage in small numbers, and occasionally in winter. Most records are for autumn, but the species occasionally winters at Earlshall, where it also occurs in spring. One was seen as Morton on 15th February 1957.

-. [Gyr Falcon *Falco rusticolus.* A bird seen by different observers at Tentsmuir Point on 20th February 1955, and again the following day at Shelly Point, was probably this species (*E.B.B.* 5: 49).].

56. Merlin *Falco columbarius.* Regularly on passage, most reports for autumn. Occasionally spends winter at Earlshall, where it also occurs in spring. Has been recorded at Tentsmuir Point and Morton Lochs.

-. (Red-footed Falcon *Falco vespertinus.* A male was seen in the Newport area by William and John Berry and others from 21st to 23rd November 1941 and stayed for about a month).

57. Kestrel *Falco tinnunculus*. Seen on all parts of Tentsmuir; one or two pairs nest at Earlshall. Also seen on passage at Tentsmuir Point and Shelly Point, mostly in autumn.

58. Red Grouse *Lagopus lagopus scoticus*. No longer occurs. Was introduced in July 1876, and as the stock increased was shot annually. Highest bag was 64 brace in 1902. Last seen on Earlshall in June 1947.

59. Black Grouse *Lyrurus tetrix*. First appeared on Tentsmuir about 1902 and first nested in 1906; last nesting record was 1919. By 1925 it had been cleared from the new forests, and today is seen very occasionally. From time to time in the early years of this century birds were introduced to the moor and these probably formed the bulk of the breeding stock.

60. Capercaillie *Tetrao urogallus*. Seen on occasions at Earlshall during the past twenty years. One was shot at Scotscraig in 1901.

61. Partridge *Perdix perdix*. Resident. Found in good numbers on all parts of open ground on Tentsmuir, even the coastal strips. Nests where found. No longer hand-reared on Earlshall or at Morton.

62. Quail *Coturnix coturnix*. Rare casual, not recorded since one was found dead at Leuchars on 6th June 1932. William Berry reports one shot at Morton Lochs, but gives no date.

63. Pheasant *Phasianus colchicus*. Resident, breeding in good numbers. Very common, and has even been seen amongst waders on Shelly Point. No longer hand-reared.

64. Water Rail *Rallus aquaticus*. Occasionally seen in winter, mostly at Morton Lochs. Latest records for Morton are of single birds on 17th September 1952 and 4th April 1959. Only one record for Earlshall—a single bird in February 1952.

-. [Baillon's Crake *Porzana pusilla*. On 3rd January 1889 a tiny crake was caught at Scotscraig by W. Berry and later released. A detailed description was shown to Dr Eagle Clarke, who reported that the bird was a Baillon's Crake. As the record has never been published, and neither the description nor Dr Eagle Clarke's comments can be traced, it is impossible to be absolutely certain that the bird could not have been a Little Crake *Porzana parva*.].

65. Corncrake *Crex crex*. At one time numerous as a nesting bird, but rarely seen today. The only records for many

years are a pair at Earlshall on 7th June 1950 and a single bird there during May 1953.

66. Moorhen *Gallinula chloropus*. Nests at Morton Lochs and Earlshall, though numbers have fallen over past fifty years. Little, if any, change in the population in winter.

67. Coot. *Fulica atra*. Common at Morton Lochs, where it has increased as a nesting bird since 1949. Numbers increase during passage and in winter, and there have been counts of over 100 in recent years. One record only for Earlshall—a single bird on 28th March 1954. Regularly seen in small numbers in both estuaries in winter. Prior to 1939 large flocks were said to frequent Tayport Bay, but these are no longer seen.

68. Oystercatcher *Haematopus ostralegus*. Found in large numbers at all seasons, but does not nest on Tentsmuir. On passage and in winter vast flocks occur on Shelly Point (see Wader Counts). Numbers at Tayport are much smaller, seldom exceeding 500. Occurs regularly at Morton Lochs and surrounding fields in small numbers. From 200 to 400 non-breeding birds remain in area throughout the summer, but in 1953 *c*. 1000 remained on the Eden.

69. Lapwing *Vanellus vanellus*. Nests at Earlshall where it has increased since 1948; twenty-five pairs nested in 1953. Most fields in the western portion also have nesting pairs each year. Outwith the breeding season it is found throughout the area. During autumn passage, and occasionally in winter, large flocks occur on the Eden, *e.g*. *c*. 1000 on 29th October 1950, *c*. 2000 on 3rd October 1953, at least 5000 on 22nd November 1953. At Tayport numbers seldom exceed 200. Also seen at Morton at all seasons.

70. Ringed Plover *Charadrius hiaticula*. Has increased as a breeder since 1949, when only a few pairs were found on the east shore. In 1953 nearly fifty nests were found, Shelly Point being the main site. Only one nest was found in Tayport Bay. Flocks of *c*. 100 (*c*. 250 on 23rd August 1953) are seen on autumn passage, but it is scarce or absent during the winter. The breeding population returns to Shelly Point from mid-February. Only two records for Morton Lochs—a single bird on 18th August 1923 and a pair on 7th May 1955. Spring passage may occur, small numbers of birds being involved, but satisfactory evidence is lacking.

71. Grey Plover *Charadrius squatarola*. Occurs on passage and in winter. Is most numerous on the Eden where 50/60 usual in winter; on passage up to 200 have been recorded (*e.g*. on 29th March 1953). Seldom more than

ten have been seen at one time at Tayport. Two records for Morton Lochs—ten on 20th August 1928, and one on 2nd November 1953. Single birds and pairs seen at Shelly Point in May, June and July.

72. GOLDEN PLOVER *Charadrius apricarius*. Last nested at Earlshall in 1938. Now occurs only on passage and in winter, flocks of up to 1000 being seen on the Eden from September onwards. Also seen in the fields in winter and has occurred at Morton Lochs. Birds showing the characters of the Northern race *Ch. a. altifrons* occur almost annually on autumn passage.

73. DOTTEREL *Charadrius morinellus*. One report. Seven seen at Morton Lochs on 3rd May 1915, falling to four on 30th May.

74. TURNSTONE *Arenaria interpres*. Mainly on passage, but a few present in winter. Also regularly seen from May to July. Occurs in both estuaries, largest numbers on the Eden. Top count 75 on Shelly Point on 23rd August 1953, and again on 31st July 1954.

75. SNIPE *Gallinago gallinago*. Nests on Earlshall (c. 15 pairs) and Morton Lochs (2 or 3 pairs). Generally absent from the marshes on Earlshall in September and October, but found from then onwards in varying numbers. Present at Morton Lochs at all seasons, an unusually large "wisp" of 31 being seen on 15th March 1960. Up to twenty can be seen on the Eden in winter.

76. GREAT SNIPE *Gallinago media*. Three records of single birds: one which weighed over 5½ ozs. shot at Morton Lochs on 28th October 1898; a bird which was most probably a Great Snipe seen by H. Boase on 3rd August 1918; and a third seen by the writer at Earlshall on 28th October 1951 which rose slowly at his feet with a harsh croak.

77. JACK SNIPE *Limnocryptes minimus*. At one time numerous in winter at Morton Lochs, but very few have been seen there in recent years. Latest record is of 4 or 5 on 26th April 1960. Also seen on the Eden, where there are recent records of single birds on 19th October 1952 and 7th February 1954. One was seen at Tentsmuir Point on 14th November 1960.

78. WOODCOCK *Scolopax rusticola*. A few pairs nest in the new forests and at Earlshall. Has also nested in the plantations which existed west of Morton Lochs. One Eden record—a single bird on 19th October 1952.

79. CURLEW *Numenius arquata*. Common at all times. Nests on Earlshall Moor (15 or more pairs) and Tentsmuir Point (2 pairs in 1952 and 1953). Occurs on passage and in winter, and from July to April is numerous on the Eden

(see Wader Counts). Is also regularly seen at Tayport and Morton Lochs. Large numbers of non-breeding birds remain in the area in summer, particularly at Earlshall and the Eden.

80. Whimbrel *Numenius phaeopus*. Spring and autumn passage migrant, with largest numbers in autumn, *e.g.* 25 on Shelly Point on 24th August 1952, and 34 on 21st August 1955. In spring, numbers seldom exceed two or three. Has occurred at Tayport and Tentsmuir Point, but not at Morton Lochs.

81. Black-tailed Godwit *Limosa limosa*. Occurs on passage and in winter at both estuaries and at Morton Lochs. About 100 were seen on the Eden on 28th August 1936, and 62 on 21st September 1952, while between 1949 and 1955 the average winter number was *c.* 35. Highest count at Morton is 49 on 15th July 1952. A pair was at Morton in June 1951, and three adults in full breeding plumage spent the summer of 1952 on the Eden. It is not known to which race these birds belong. Up to at least the early 1930's this was looked upon as an uncommon species.

82. Bar-tailed Godwit *Limosa lapponica*. Occurs on passage and in winter, with up to fifty non-breeding birds remaining in summer. Largest numbers occur on the Eden (see Wader Counts), where up to 700 can be seen in winter (*c.* 1000 in January and February 1954), but at Tayport numbers seldom exceed 100. A flock of 500 was at Tentsmuir Point on 5th August 1959. It has been recorded occasionally at Morton Lochs.

83. Green Sandpiper *Tringa ochropus*. Autumn passage migrant which has been recorded at Morton Lochs from June to September, and once in winter—a single bird on 21st February 1954. It has also been recorded at Tayport and on the Eden in autumn.

84. Wood Sandiper *Tringa glareola*. Casual. Two records for Morton Lochs—single birds on 1st August 1911, and again on 28th July 1959 (*S.B.* 1: 200).

85. Common Sandpiper *Tringa hypoleucos*. Autumn passage migrant in small numbers. Occurs on both estuaries and at Morton Lochs, most records being in July and August. Earliest and latest dates are 28th June 1912 and 14th October 1951. There have been no spring records.

86. Redshank *Tringa totanus*. Not less than twelve pairs nest at Earlshall and coastal strips, and it has also nested at Morton Lochs. Occurs on passage and in winter, with largest numbers on the Eden (see Wader Counts). Numbers are very much smaller at Tayport, while those at Morton Lochs seldom exceed ten.

87. Spotted Redshank *Tringa erythropus*. Autumn passage migrant, mostly on the Eden, but also occasionally at Morton Lochs. Highest counts—8 on the Eden on 16th September 1951, and 5 at Morton Lochs on 17th September 1955 which remained for about two weeks. One winter record—a single bird at Edenmouth on 28th December 1937.

88. Greenshank *Tringa nebularia*. Regular autumn passage migrant and occasional winter visitor. Generally less than ten birds are seen but in August/September 1953 and September 1954 parties of up to thirty were seen on the Eden. Smaller numbers are found at Tayport and Morton Lochs, the highest count at Morton being five on 2nd November 1953. There are recent records for all winter months, but none for April, May or June.

89. Knot *Calidris canutus*. Occurs on passage and in winter, sometimes in very large numbers (see Wader Counts). Largest flocks are found on the Eden, but at Tayport numbers seldom exceed 150. There are no records for Morton Lochs. Up to fifty non-breeding birds remain all summer at Shelly Point.

90. Purple Sandpiper *Calidris maritima*. Two records of single birds: one was seen on the east shore in September 1915, and one shot there in 1929.

91. Little Stint *Calidris minuta*. Regular on autumn passage on both estuaries in August and September. Single birds usual, but eight on Eden on 6th September 1953. Has occurred at Morton Lochs, but not since 1939.

92. Dunlin *Calidris alpina*. Last nested in 1937 (see "Important Breeding Species") and now occurs only on passage and in winter, with non-breeding birds on the shore in summer. Largest flocks on the Eden (see Wader Counts); at Tayport *c.* 500 largest number. Also nested at Morton Lochs, but rarely seen there now, only recent reports being of single birds on 26th August 1951 and 17th September 1955.

93. Curlew Sandpiper *Calidris testacea*. On passage in August and September, and once in October. Mostly up to five birds seen, but 40 on the Eden on 6th September 1953. Seen annually at Tayport, and once at Morton Lochs, on 20th August 1912.

94. Sanderling *Crocethia alba*. Recorded in all months, but mainly on passage and occasionally in winter. Most numerous August/October, and again March/April, from 50 to 70 usual (but over 150 at Tayport on 31st August 1952). Seven winter records between 1949 and 1955; highest count ten. No reports for Morton Lochs.

95. Broad-billed Sandpiper *Limicola falcinellus*. Rare casual.

One was shot at Morton Lochs on 12th August 1912, and one bird seen on the Eden on 9th September 1946 (Baxter & Rintoul, 1953).

96. RUFF *Philomachus pugnax*. Occurs on passage in August and September on both estuaries, and occasionally at Morton Lochs. A single bird at Morton on 3rd October 1949. Single birds usual, but 59 on the Eden on 28th August 1954.

97. GREY PHALAROPE *Phalaropus fulicarius*. One shot at Tayport in October 1885—the only record. (One at St Andrews in January 1952.).

98. GREAT SKUA *Catharacta skua*. Occasionally seen on the Angus side of the Tay but the only definite record inside the Eden Estuary is of one seen on 17th September 1961.

99. ARCTIC SKUA *Stercorarius parasiticus*. Seen annually from June to October, but mostly in August and September. Largest count is 40 on 30th August 1907, but the highest count in recent years was nine on the Eden on 4th September 1955.

100. POMARINE SKUA *Stercorarius pomarinus*. In 1930 a few were seen off the east shore and one was shot for identification. The only other recent record is of three off Tentsmuir Point on 14th August 1956. Each year numbers of skuas are seen off-shore, usually too far out for identification and as this species occurs regularly in the Forth some of these may well be Pomarines.

-. (LONG-TAILED SKUA *Stercorarius longicaudus*. One obtained at Newport in 1880, and one at St Andrews on 29th April 1868).

101. GREATER BLACK-BACKED GULL *Larus marinus*. Present on the shore the year round but does not nest on Tentsmuir. Numbers in summer are small, but during autumn passage up to 500 can be seen at one time. Generally less than 100 present in winter, with slight increase in spring. Occasional at Morton Lochs.

102. LESSER BLACK-BACKED GULL *Larus fuscus*. Occurs on spring and autumn passage, the highest count being twelve birds at Tayport on 31st August 1952. Also occurs then at Morton Lochs. Has not been recorded in winter. The Scandinavian race *L. f. fuscus* has been obtained twice—on 8th September 1923 and 30th August 1924.

103. HERRING GULL *Larus argentatus*. Nested on Tentsmuir for the first time in 1955, when one pair bred on Earlshall. Common on the shore, and at Morton Lochs, at all seasons. Up to c. 3000 are common on the shore in autumn. At dusk large numbers flight in from other areas to

Abertay Sands, which seems to be the main roosting ground. A similar, but smaller, flighting takes place to the Eden.

104. Common Gull *Larus canus*. On passage and in winter, with some remaining all summer. Has not nested, but on several occasions adults have been seen in the Black-headed Gull colony on Earlshall. Passage flocks can total up to *c*. 750 birds, with largest flocks in spring. Wintering birds have increased in number, and 700/800 were at Tayport on 25th January 1953. It is common in fields and at Morton Lochs in winter.

-. (Glaucous Gull *Larus hyperboreus*. One was recorded at Newport on 20th July 1910).

-. (Iceland Gull *Larus glaucoides*. One present near Newport from 1st to 15th August 1922).

105. Little Gull *Larus minutus*. Although seen in large numbers on the Angus coast (*S.B.* 1: 362), this species is only occasionally noted at Tayport/Tentsmuir Point. There are only six records up to 1960, the highest count being five on 18th April 1954 (but 60/70 on 29th April 1961). There are only two recent reports for the east shore—four birds on 24th July 1955 and 42 on 29th April 1959. There is one Eden record of eight on 1st May 1960. At Morton Lochs the first record was of a juvenile in June 1954, but since then the species has become an annual visitor in April, May and June. Highest counts—30 on 23rd May 1955, 32 on 12th April 1959, and over 70 on 27th April 1956.

106. Black-headed Gull *Larus ridibundus*. Nests at Earlshall, with a few pairs on Shelly Point (see "Important Breeding Species"). Most juvenile birds disperse in late summer, some migrating, and there have been ringing recoveries from the Continent, Southern Ireland and other parts of the British Isles. The position of breeding birds is obscure, but probably many remain in the area, or disperse over adjoining coasts and fields. Possibly some of the wintering birds are visitors. Present at Morton Lochs the year round.

107. Sabine's Gull *Xema sabini*. An adult on Shelly Point on 7th September 1952 is the only record (*E.B.B.* 3: 5).

108. Kittiwake *Rissa tridactyla*. Mainly on passage, but occasionally in summer and winter. Numbers in spring generally small, but in autumn *c*. 750 seen at Tentsmuir Point. Small numbers only on the Eden. Has been recorded at Morton Lochs.

109. Black Tern *Chlidonias niger*. Casual, recorded twice at Morton Lochs. Two were present on 26th/27th September 1953, and two for five days from 16th May 1955. Two

were seen on the Eden on 12th September 1959.

110. Common Tern *Sterna hirundo*. Nests on Shelly Point, the east shore and Earlshall Moor (see "Important Breeding Species"). Also occurs on passage and has been recorded five times in winter, once in December, three times in January and once in February. First arrivals seen about third week of April, and most leave the area by late September or early October. Occurs at Morton Lochs in summer.

111. Arctic Tern *Sterna macrura*. Nests on Shelly Point and east shore (see "Important Breeding Species"). Occurs also on passage. First arrivals seen at the beginning of May (earliest date 7th) and most have gone by end of September (latest date 12th November 1950). No reports for Morton Lochs.

112. Roseate Tern *Sterna dougallii*. Has nested twice (1927 and 1936—see "Important Breeding Species") but otherwise an occasional spring and summer visitor. At least two pairs present at Shelly Point in summer of 1956, but no nests found.

113. Little Tern *Sterna albifrons*. Nests on Shelly Point and east shore (see "Important Breeding Species"). First arrivals usually seen in third week of April, though the main body arrives in early May. This is usually the first tern to leave, most having gone by mid-September (latest date 24th September 1950). Occurs also on spring and autumn passage, particularly at Tentsmuir Point. No reports for Morton.

114. Sandwich Tern *Sterna sandvicensis*. At one time nested in large numbers but today only does so sporadically, largest post-war colony being 48 pairs in 1956 (see "Important Breeding Species"). Mainly on passage, up to c. 400 birds seen in spring and autumn. This is usually the first tern to arrive in early April (earliest date 3rd April 1953), but not in any great number until about the third week, when it is found on both estuaries and on the east shore. Most have gone by end of September (latest record 16th November 1910). No reports for Morton.

115. Razorbill *Alca torda*. Seen off-shore at all seasons. Reports suggest a small but marked passage along the east shore, Largest count—50 birds at Tentsmuir Point on 17th February 1952.

116. Little Auk *Plautus alle*. Casual; recorded on seven occasions since 1950. There are also earlier records. One bird was seen at Tentsmuir Point on 6th October 1951, and a corpse picked up at Shelly Point on 23rd December 1951. Two birds were seen on two occasions in January 1952 at Tayport. On 15th February 1953 a corpse

was found on Shelly Point, and a live bird was seen there on 2nd October 1955; another corpse was picked up on Tentsmuir Point on 10th January 1956.

117. GUILLEMOT *Uria aalge*. Seen off-shore at all seasons, generally single birds. About 60% of all oiled birds on east shore are of this species.

118. BLACK GUILLEMOT *Cepphus grylle*. Rare casual, not recorded for many years. William Berry states that it occurred very occasionally.

119. PUFFIN *Fratercula arctica*. Rarely seen, with only a few records for the Tay area since 1949. All recent records for shore area are of corpses.

120. PALLAS'S SANDGROUSE *Syrrhaptes paradoxus*. Occurred during the 1888 irruption. Harvie-Brown gives the total as over 90 birds. (William Berry gives the number as *c.* 200).

121. STOCK DOVE *Columba oenas*. Has been known on Tentsmuir since about 1884, and first nested in 1892. Today the species nests in all suitable sites over the whole area and is commonly seen in the fields, on the moorland and on the shore.

122. WOODPIGEON *Columba palumbus*. Common and numerous, nesting freely in the new plantations as well as other suitable sites. Large flocks of 400/500 birds are common on arable land in winter and some of these may be winter visitors.

123. CUCKOO *Cuculus canorus*. Summer visitor in small numbers. Breeds. Reported from all parts, including Morton Lochs. Arrives at Earlshall in early May (early date 16th April 1954) and is seldom seen after mid-August.

124. BARN OWL *Tyto alba*. Always rather scarce, and seldom seen or heard today. Very few have been seen this century, and the last known report is of a single bird near Tayport on 9th September 1946.

-. (SNOWY OWL *Nyctea scandiaca*. One seen on Eden Golf Course on 31st January 1936 (*S.N.* 1936: 45).).

125. TAWNY OWL *Strix aluco*. Present all year throughout the area. Nests in the new plantations and at Earlshall, and has also nested in a nest-box at Morton Lochs.

126. LONG-EARED OWL *Asio otus*. Nests in the new forests and at Earlshall, and is found in these areas at all seasons. Has been recorded at Morton.

127. SHORT-EARED OWL *Asio flammeus*. Has nested on several occasions since 1936 on Earlshall. A pair remained at Morton Lochs during the summer of 1953, but nesting was not confirmed. Seen regularly on passage and in winter.

128. SWIFT *Apus apus*. Nests at Tayport and Leuchars. Small numbers are seen on the coast in spring and autumn, and 40 were seen over Earlshall on 12th July 1953. Occasionally seen at Morton Lochs.

129. KINGFISHER *Alcedo atthis*. Occasionally seen on passage, but no reports since 1928. On 1st October 1927 *c*. 30 in small parties were seen going south at Tentsmuir Point, while on 14th August 1928, "quite a number" were at Morton Lochs (William Berry). Has also been recorded in November and December.

130. GREAT SPOTTED WOODPECKER *Dendrocopos major*. No reports prior to 1947, but since then has been recorded on a few occasions between August and April at Earlshall. A pair was present in the forest at Fettars in the spring of 1952 but breeding was not confirmed.

131 .SKYLARK *Alauda arvensis*. Numbers were considerably reduced by afforestation, but the species still breeds commonly on Earlshall, the coastal strips and at Morton Lochs. The majority of nesting birds arrive in March and April, and leave at the end of July or beginning of August. There are marked movements on the coast in spring and autumn (*e.g.* during a short spell of watching 61 were counted moving south over Shelly Point on 4th October 1954). A few are found in all parts in winter.

132. SHORE LARK *Eremophila alpestris*. Two reports—three birds at Tayport on 7th January 1924, and a pair which spent a week at Shelly Point from 25th November 1951.

133. SWALLOW *Hirundo rustica*. Summer visitor, nesting in all suitable sites. Arrives at Earlshall about mid-April (earliest date 11th) and most are at their nesting sites by the end of the first week in May. The move away begins in late August and most have gone by the end of September. Also occurs on passage, most marked in late September and early October; has been seen up to November (late date 12th November 1950 at Shelly Point). Small numbers are at Morton from July to early September.

134. HOUSE MARTIN *Delichon urbica*. Nests at Earlshall, Leuchars and Tayport. Arrives in early May (earliest date 12th May 1951) and most have gone by the end of September. Also occurs on passage, when frequently seen at Morton Lochs as well as on the coast. Late dates are 19th November 1927 and 2nd November 1950.

135. SAND MARTIN *Riparia riparia*. Occasionally nested in the sand-hills on Earlshall Moor, last doing so in 1949. For the past few years a colony has existed in a slag-heap

at Guardbridge, while a much larger colony is at St Michael's. Also on spring and autumn passage, when seen annually at Morton Lochs. First arrivals seen in mid-April (early date 4th April 1954) and most have gone by early September (late date 14th September 1952).

136. CARRION/HOODED CROW *Corvus corone.*

(a) CARRION CROW *C. c. corone.* Fairly numerous at all seasons. Nests in the new forests, the deciduous wood at Earlshall, and has nested on the stone tower on Lucky Scalp in Tayport Bay. Numbers increase in winter when common in the fields and on both estuaries. On 23rd December 1951 *c.* 100 were counted going to roost at Earlshall. May also occur on passage (*e.g.* flock of *c.* 70 at Fettars in March 1952). Is shot and trapped on Earlshall, the annual kill averaging over eighty during the past twenty years.

(b) HOODED CROW *C. c. cornix.* At one time nested at Kinshaldy, but has not bred on Tentsmuir for many years. Now occurs on passage and in winter. Never numerous, highest count being eleven on Earlshall on 23rd December 1951. Recorded in all months, but mostly November and March.

137. ROOK *Corvus frugilegus.* Numerous throughout the area. The main rookery is at Earlshall (over 500 pairs), while smaller rookeries exist at Tayport, Guardbridge and Leuchars. Numerous in winter in the fields, and parties of over 100 are common in both estuaries. Those on the shore at Tayport include many birds from Angus, there being a steady movement across the Tay morning and evening. There is also a south to north movement from Tayport each morning, with a consequent return in the evening, showing that many from Tentsmuir seek their food on the Angus side of the river. A percentage of birds in the Earlshall rookery are destroyed each year, the average number being *c.* 1500 annually; this includes both adults and birds of the year. Occurs regularly at Morton Lochs.

138. JACKDAW *Corvus monedula.* Common throughout. Nests in moderate numbers at Earlshall and Tayport, with smaller numbers in other suitable sites. Outwith the nesting season invariably present on the flats of the Eden and Tay, as well as in the fields and around Morton Lochs. May also occur on passage, being recorded almost annually on Tentsmuir Point.

139. MAGPIE *Pica pica.* At one time two pairs nested at Scotscraig, but has been lost as a breeding bird. Commonly seen on Earlshall in the immediate post-war period, the

species was shot to the last bird. Now casual to Tentsmuir, the last record being a single bird on 13th April 1955.

140. JAY *Garrulus glandarius*. First noted in the new forests in 1924, but date of first nesting not known. Has now colonized all planted areas and seems to be quite numerous.

141. GREAT TIT *Parus major*. Nests in many parts, but particularly at Earlshall and in the new forests. Small parties common in the hedgerows in winter. Also seen regularly at Morton Lochs.

142. BLUE TIT *Parus caeruleus*. More numerous than the Great Tit, nesting in fair numbers throughout the area. Commonly seen in bushes on the Eden and at Morton Lochs. Small flocks frequent the forests and hedgerows in winter.

143. COAL TIT *Parus ater*. Probably the most numerous tit on Tentsmuir. Nests freely throughout the new forests, and other wooded areas. Is probably truly resident.

144. LONG-TAILED TIT *Aegithalos caudatus*. The least common tit: frequently seen but never numerous. Seen every summer near the deciduous wood on Earlshall Moor but breeding has never been confirmed though family parties have been noted there in autumn. Small parties occasional in winter.

145. TREECREEPER *Certhia familiaris*. Nests freely in the new forests and a few pairs breed regularly at Earlshall. Probably a true resident.

146. WREN *Troglodytes troglodytes*. Common, nesting in all sections. Seen the year round on Earlshall, in the forests, at Morton Lochs and on the banks of the Eden. Found on the coastal strips in winter.

147. MISTLE THRUSH *Turdus viscivorus*. At one time common, had become scarce by 1947. Since then has increased, especially at Earlshall, where three or four pairs nested in 1952, five or six pairs in 1953 and again in the following two years. One pair was seen in the Rires Forest in April 1954. Also occurs regularly near Morton Lochs. Records would suggest that it occurs on autumn passage, *e.g.* 41 on Earlshall on 28th August 1954, and *c.* 30 at Morton Lochs on 21st August 1955.

148. FIELDFARE *Turdus pilaris*. Occurs on passage and in winter, being found from September to April with stragglers into May. Often numerous on passage, winter numbers smaller. Mainly found in the fields but occurs annually by both estuaries.

149. SONG THRUSH *Turdus philomelos*. Common breeding bird,

nesting in all suitable sites. Recent observations show it to be scarce or absent from many parts in winter, and though some of the Tayport birds may be resident the species occurs mainly as a summer visitor to most of the area. May also occur on passage, particularly around Edenmouth, and birds found on the Eden from November to February may be winter visitors.

150. REDWING *Turdus musicus*. Occurs on passage and in winter, being found from September to March. Particularly numerous in the winter of 1951/52, when many perished in the hard weather which occurred from December onwards. Scarce in autumn 1952 and absent from most parts that winter. In 1953 was again common, and on 31st January 1954 *c.* 300 were at Earlshall. Found in the fields, at Morton Lochs and on the banks of both estuaries.

151. BLACKBIRD *Turdus merula*. Common, nesting in all suitable places, and is a common breeder in the new forests May also occur on passage and in winter, when flocks of *c.* 30 are seen.

152. WHEATEAR *Oenanthe oenanthe*. Occurs on passage and as summer visitor, about twelve pairs nesting on Earlshall with a few more pairs on the coastal strips. The breeding population arrives about the end of March or beginning of April, while passage reaches its peak during the second week of April. In autumn, regularly seen until the end of September, with stragglers into October (latest date 31st October 1951). The Greenland race *Oe. oe. leucorrhoa* has been recorded on a few occasions in spring.

153. STONECHAT *Saxicola torquata*. Until the severe winter of 1947 a few pairs nested at Morton Lochs, near which at least one pair has recently bred regularly. Elsewhere on Tentsmuir it is seen in small numbers, and has increased since 1950.

154. WHINCHAT *Saxicola rubetra*. Lost as a nesting species by 1938, though at one time bred in the Scotscraig/Morton area. Seen on only five occasions since 1952—once in May at Earlshall, and four times in August (twice by the Eden and twice at Morton).

155. REDSTART *Phoenicurus phoenicurus*. Casual. Two reports only since 1949—single birds at Earlshall on 9th September 1949 and Tentsmuir Point on 4th April 1954.

156. BLACK REDSTART *Phoenicurus ochruros*. Casual. Only two reports—single birds at Guardbridge on 3rd November 1926 and Shelly Point 28th October 1951.

157. ROBIN *Erithacus rubecula*. Nests in all suitable localities

and common in the new forests. In winter regular on the Eden and east shore, and some of these birds may be winter visitors.

158. SEDGE WARBLER *Acrocephalus schoenobaenus.* Summer visitor, nesting in small numbers at Earlshall and Morton Lochs. Usually arrives in early May and departs about the end of August (latest date 4th September).

159. BLACKCAP *Sylvia atricapilla.* Rare casual. One bird was seen at Earlshall in August 1950.

160. GARDEN WARBLER *Sylvia borin.* Only two records, both for 1951 of a pair at Earlshall on 6th May and one bird on 2nd June.

161. WHITETHROAT *Sylvia communis.* Summer visitor, four to five pairs nesting at Morton Lochs with others at Tayport. Not recorded breeding at Earlshall until 1953, when two nests found; three pairs bred in 1954 and 1955. Occasionally seen on the Eden in autumn.

162. WILLOW WARBLER *Phylloscopus trochilus.* Has increased remarkably since 1949 and is now a common summer visitor to the whole area, nesting where found. Some of the spring and autumn records may refer to birds on passage.

163. GOLDCREST *Regulus regulus.* Has colonized all the new forests and appears to be quite numerous. Probably a true resident. There is no undue increase in numbers in winter.

164. SPOTTED FLYCATCHER *Muscicapa striata.* Summer visitor, never numerous. Generally present in summer but no nests found in recent years. In 1952 two adults were seen carrying food near Morton Lochs. Has nested at Fettardale and Earlshall and may still do so. Spring records may refer to birds on passage.

165. PIED FLYCATCHER *Muscicapa hypoleuca.* A single bird on 9th May 1904 is the only record. (A female was obtained at Newport in September 1953).

166. HEDGE SPARROW *Prunella modularis.* Common, nesting in all suitable habitats and has been seen on many occasions in the new forests. Most are probably resident.

167. MEADOW PIPIT *Anthus pratensis.* Mainly summer visitor, but also on passage and in winter. Common in summer, the largest numbers nesting on Earlshall. Breeding population arrives in late March, the majority leaving in late August and September. Spring passage is more marked than autumn, though the latter tends to be more prolonged.

168. TREE PIPIT *Anthus trivialis.* Few reports, but probably not as scarce as records suggest. Many unidentified

pipits are seen each year and some of these may be this species. Most recent record is one shot from a small flock of pipits flying over Tayport Bay on 24th August 1950.

169. ROCK PIPIT *Anthus spinoletta*. Regular at Tayport from September to April. Also seen annually on Shelly Point and Eden Estuary.

170. PIED/WHITE WAGTAIL *Motacilla alba*.

(a) PIED WAGTAIL *M. a. yarellii*. Nests on most parts of Tentsmuir other than the new forests. (A pair was seen in a ride in Rires Forest in May 1954). Many, if not all, breeding birds are summer visitors, the wintering population being comparatively small. Also occurs on passage, when seen on east shore in spring and autumn, sometimes in good numbers (*e.g.* 95 moving south over Shelly Point from 2nd to 4th October 1954).

(b) WHITE WAGTAIL *M. a. alba*. Occurs regularly in spring and autumn.

171. GREY WAGTAIL *Motacilla cinerea*. Rare casual, the one positive record being of a single bird at Morton Lochs on 12th August 1919. Several were reported at Tayport in September 1946, but identification is in doubt.

172. YELLOW WAGTAIL *Motacilla flava*. Rare casual, the only record being of a single bird at Earlshall on several occasions in March 1950. There is a doubtful report of two at Tayport in September 1946.

173. WAXWING *Bombycilla garrulus*. Erratic winter visitor which has been seen on a number of occasions since 1949.

174. RED-BACKED SHRIKE *Lanius cristatus collurio*. One record, a female at Earlshall on 21st May 1950.

175. STARLING *Sturnus vulgaris*. Nests throughout the area. Small numbers, mainly immatures, occur on the coast in autumn, while in winter it is numerous in most parts.

176. ROSE-COLOURED STARLING *Sturnus roseus*. One record—a single bird at Tayport on 31st March 1954 (*E.B.B.* 4: 50).

177. GREENFINCH *Chloris chloris*. Common the year round and nests throughout the area. In winter regularly seen on the Eden and Tayport flats, while in autumn flocks of up to *c.* 100 strong are not uncommon. These could be flocks of resident birds, but on 8th November 1953 *c.* 500 were seen with an equal number of Linnets on the Eden and these were undoubtedly on passage.

178. GOLDFINCH *Carduelis carduelis*. Very few records this century. Single birds were seen at Leuchars in 1923 and Tentsmuir Point in 1924; the only records since then are three birds at Morton Lochs on 1st October 1955,

and two on the Eden on 11th March 1956.

179. Siskin *Carduelis spinus*. Occurs occasionally in winter. There is an unconfirmed report of nesting in June 1923.

180. Linnet *Carduelis cannabina*. Common at all seasons. Nests on Earlshall, Morton Lochs and the coastal strips, though numbers are probably less than in pre-afforestation days. In winter regular on the Eden, at Tayport and Morton Lochs, while in autumn flocks of over 100 are seen on the Eden (see under Greenfinch). Also on passage in spring.

181. Twite *Carduelis flavirostris*. Reported as nesting in 1921, but there is some doubt about this. Nested in 1923. Occasional in winter, the most recent reports are of one bird on the Eden on 22nd November 1953, and three on Shelly Point on 31st January 1954.

182. Lesser Redpoll *Carduelis flammea disruptis*. Not recorded up to about 1930, but regularly since then. As far as is known it has not nested, but may well do so somewhere in the 4000 acres of forest.

183. Bullfinch *Pyrrhula pyrrhula*. True status doubtful, but may only occur on spring and autumn passage. Recent reports are all of birds on or near the coast in spring and autumn (largest count eight on 30th September 1952); there are earlier records for June.

184. Crossbill *Loxia curvirostra*. Several reports, usually of parties seen during irruptions (*e.g.* September 1953).

185. Chaffinch *Fringilla coelebs*. Common in old plantations; was said to have disappeared following new afforestation. Since 1943 has become numerous throughout new forests and is also common in other areas, nesting in all suitable sites. Flocks of *c.* 100 are regular in winter.

186. Brambling *Fringilla montifringilla*. Winter casual, usually in small numbers. Recorded in most parts, the largest count being 20 near Morton Lochs during January 1952.

187. Yellowhammer *Emberiza citrinella*. Seen throughout at all seasons. Up to 1947 had not been reported from new forests, but today small numbers nest on the fringes of most of these. Also nests at Earlshall, Morton and other sites. Parties of up to *c.* 40 common in winter.

188. Corn Bunting *Emberiza calandra*. Erratic summer visitor, nesting at Earslhall and Morton area, and possibly elsewhere. In 1952 was common in the Leuchars/Earlshall area where in the previous two years it had not been seen. In 1953 two males were singing in the same area, and in 1954 four males were doing so. Until 1953 there was only one winter record, but in the winter of

1953/54 and again in 1954/55 the species was seen on many occasions in various places (highest count 11 birds).

189. Reed Bunting *Emberiza schoeniclus*. Nests at Earlshall and Morton Lochs. Also occurs on spring and autumn passage, while in winter is common in reed beds at Morton Lochs, Earlshall and the Eden.

190. Snow Bunting *Plectrophenax nivalis*. Mainly autumn passage migrant, and occasionally in winter. About 600 were at Tentsmuir Point during October 1951, but winter numbers are much smaller. Highest winter counts are 45 at Shelly Point on 24th February 1952, and over 60 on Tentsmuir Point on 11th December 1955. Earliest date of arrival, 19th September 1952.

191. House Sparrow *Passer domesticus*. Common and numerous, nesting where there are buildings. Foraging flocks are common everywhere in winter.

192. Tree Sparrow *Passer montanus*. A colony existed at Leuchars in 1905 and for some years afterwards, but this is now extinct. There have been no sight records for over forty years and it is doubtful whether this species now occurs on Tentsmuir.

4.—WILDFOWL AND WADER COUNTS

Throughout the period 1950/55 regular monthly counts were made of wildfowl and waders on the Eden Estuary, Morton Lochs and Tayport Bay. The Eden Estuary is now the main wildfowl and wader resort on Tentsmuir, and figures for the Eden are shown on the following pages.

Counts were made at the same period each month, those of the wildfowl in the new moon period. Wader counts were generally made at the same time, but in a few instances these were repeated a few days later and the figures amended if necessary. On occasions, accurate wildfowl counts were impossible owing to poor weather conditions, particularly bad visibility and rough water, and only estimations of numbers present could be made. Whenever possible, further counts were made within a few days. While it is not possible to claim great accuracy for estimations, they generally give a good indication of the numbers present. Practically every count was made by two or more observers, and both banks of the estuary were covered at the same time. It is doubtful whether birds were counted twice on other than a few occasions, and where this was thought to have happened, the total count was amended downwards.

Generally speaking, it was impossible to do other than estimate the numbers of waders in the huge flocks which frequent Shelly Point at high tide, when all counts were made. If anything, these estimates erred on the conservative side. On occasions, attempts were made to obtain accurate counts, and while these were never very successful they did at least show that estimates were accurate enough to give a picture of the comparative numbers of the various species present.

WILDFOWL COUNTS, EDEN ESTUARY 1950/55

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Mallard								
1950/51	156	500	2100	450	300	700	900	660
1951/52	200	350	800	1200	1190	1885	1000	50
1952/53	106	900	1900	1200	235	1400	670	250
1953/54	500	1050	200	1000	405	1150	510	139
1954/55	314	480	1370	†	1750	1550	1150	†
Teal								
1950/51	10	100	11	20	300	80	80	80
1951/52	100	100	100	220	650	350	450	26
1952/53	400	600	120	440	240	400	110	100
1953/54	250	580	400	350	450	390	150	228
1954/55	282	620	1000	†	450	1450	280	†
Wigeon								
1950/51	25	250	650	1000	3300	1500	700	100
1951/52	200	1200	1250	2800	1420	1500	1050	43
1952/53	32	600	1050	2000	1800	2750	800	20
1953/54	100	600	1250	1500	1700	2250	760	233
1954/55	354	1410	3150	†	3500	3000	1775	†
Pintail								
1950/51	0	4	2	20	100	5	30	0
1951/52	0	4	2	8	100	35	54	8
1952/53	11	100	100	100	70	125	20	0
1953/54	0	5	22	0	125	114	132	60
1954/55	25	105	102	†	150	150	75	†
Shoveler								
1950/51	0	100	100	100	300	0	25	0
1951/52	9	50	57	300	150	15	10	4
1952/53	0	160	13	240	240	56	10	0
1953/54	0	6	?	30	100	100	100	0
1954/55	35	45	98	†	100	100+	100	†
Shelduck								
1950/51	40	50	50	350	1150	900	1000	246
1951/52	104	250	396	450	860	1000	1200	700
1952/53	200	200	400	910	1000	1500	1000	550
1953/54	350	435	400	1000	1200	1400	930	900
1954/55	100	485	612	†	1500	1250	1350	†

† No count.

WADER COUNTS, EDEN ESTUARY, 1950/55

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Oystercatcher								
1950/51	3000	3000	600	1800	2000	1500	1000	350
1951/52	3000	3000	2000	1800	2100	4000	770	425
1952/53	3000	2000	3000	2500	3000	2500	750	500
1953/54	4000	4500	5000	5000	4200	4000	850	400
1954/55	3000	3000	3150	3000	3000	3500	1600	†
Curlew								
1950/51	100	200	150	150	150	200	360	157
1951/52	200	400	500	600	450	350	470	140
1952/53	475	500	600	600	500	600	400	350
1953/54	1500	600	600	600	250	500	200	250
1954/55	600	500	450	400	650	800	150	†
Bar-tailed Godwit								
1950/51	50	200	300	400	400	500	400	140
1951/52	50	250	750	500	380	600	700	60
1952/53	150	140	400	300	350	400	150	100
1953/54	300	250	1000	1000	750	1000	200	300
1954/55	200	1000	500	600	500	400	450	†
Redshank								
1950/51	100	300	400	1000	1300	1300	450	400
1951/52	1000	1000	1000	1500	1500	1200	1250	400
1952/53	700	1000	1270	1200	1000	1200	500	750
1953/54	1300	1300	2500	2000	2300	650	1250	800
1954/55	2000	2000	2300	†	2000	2000	750	†
Knot								
1950/51	50	200	700	6000	5000	5000	700	250
1951/52	200	700	2000	2600	3500	3000	1000	300
1952/53	120	150	3000	10000	6000	500	350	150
1953/54	200	450	6000	6000	3250	3000	1400	300
1954/55	207	2000	3000	3000+	6000	5000	1000	110
Dunlin								
1950/51	150	300	700	3000	4000	3000	1100	50
1951/52	200	200	1500	1250	3200	1700	1000	350
1952/53	350	500	1000	2000	2500	2000	500	80
1953/54	200	400	6000	6000	1400	3500	4000	455
1954/55	1600	1750	2000	3000	5500	3500	1500	†

† No count.

5.—SPECIES RECORDED FROM MORTON LOCHS

Black-throated Diver
Red-throated Diver
Red-necked Grebe
Slavonian Grebe
Black-necked Grebe
Little Grebe (b)
Heron
Bittern
Mallard (b)
Teal (b)
Garganey
Gadwall (b)
Wigeon (b)
Baldpate
Pintail
Shoveler (b)
Red-crested Pochard
Scaup
Tufted Duck (b)
Pochard
Goldeneye
Long-tailed Duck
Velvet Scoter
Common Scoter (b)
Eider
Red-breasted Merganser
Goosander
Shelduck (b)
Grey Lag Goose (b)
Bean & Pink-footed Geese
Barnacle Goose
Mute Swan (b)
Whooper Swan
Bewick's Swan
Golden Eagle
Sparrowhawk
Marsh Harrier
Hen Harrier
Peregrine
Merlin
Kestrel
Partridge (b)
Quail
Pheasant (b)
Water Rail
Moorhen (b)
Coot (b)
Oystercatcher
Lapwing (b)
Ringed Plover
Grey Plover
Golden Plover
Dotterel
Snipe (b)
Great Snipe
Jack Snipe
Woodcock (b)
Curlew
Black-tailed Godwit
Bar-tailed Godwit
Green Sandpiper
Wood Sandpiper
Common Sandpiper
Redshank (b)
Spotted Redshank
Greenshank
Little Stint
Dunlin (b)
Curlew Sandpiper
Broad-billed Sandpiper
Ruff
Greater Black-backed Gull
Lesser Black-backed Gull
Herring Gull
Common Gull
Little Gull
Black-headed Gull
Kittiwake
Black Tern
Common Tern
Pallas's Sandgrouse
Stock Dove (b)
Woodpigeon (b)
Cuckoo (b)
Tawny Owl (b)
Long-eared Owl
Short-eared Owl
Swift
Kingfisher
Skylark (b)
Swallow
House Martin
Sand Martin
Carrion Crow
Rook
Jackdaw
Great Tit (b)
Blue Tit (b)
Coal Tit
Wren (b)
Mistle Thrush
Fieldfare
Song Thrush (b)
Redwing
Blackbird (b)
Wheatear (b)
Stonechat (b)
Whinchat
Robin (b)
Sedge Warbler (b)
Whitethroat (b)
Willow Warbler (b)
Spotted Flycatcher
Hedge Sparrow (b)
Meadow Pipit (b)
Pied Wagtail (b)
Grey Wagtail
Starling
Greenfinch (b)
Goldfinch
Linnet (b)
Chaffinch (b)
Brambling
Yellowhammer (b)
Corn Bunting (b)
Reed Bunting (b)
House Sparrow

Total Species Recorded — 127
Breeding or have bred (b) — 45

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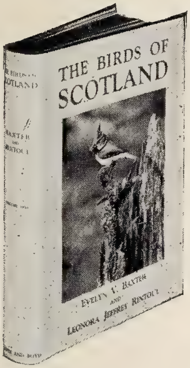

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